

Network Storage System  
90

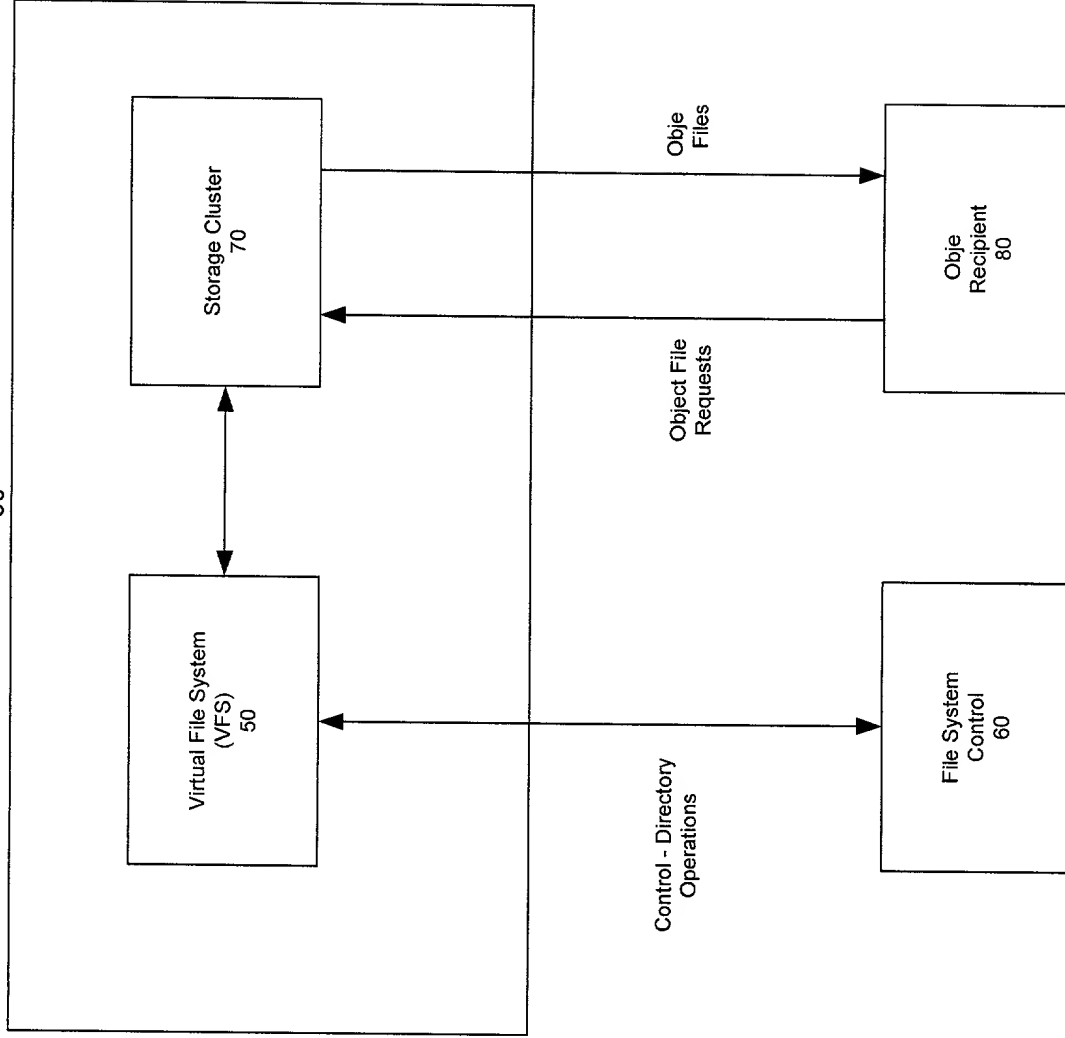
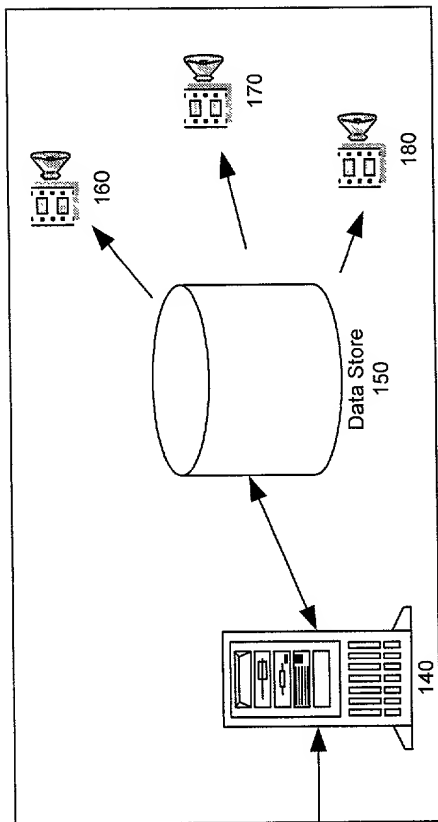
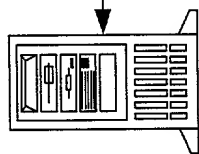


Figure 1

Storage Service  
130

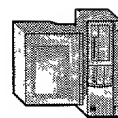


Content Origin Server  
120



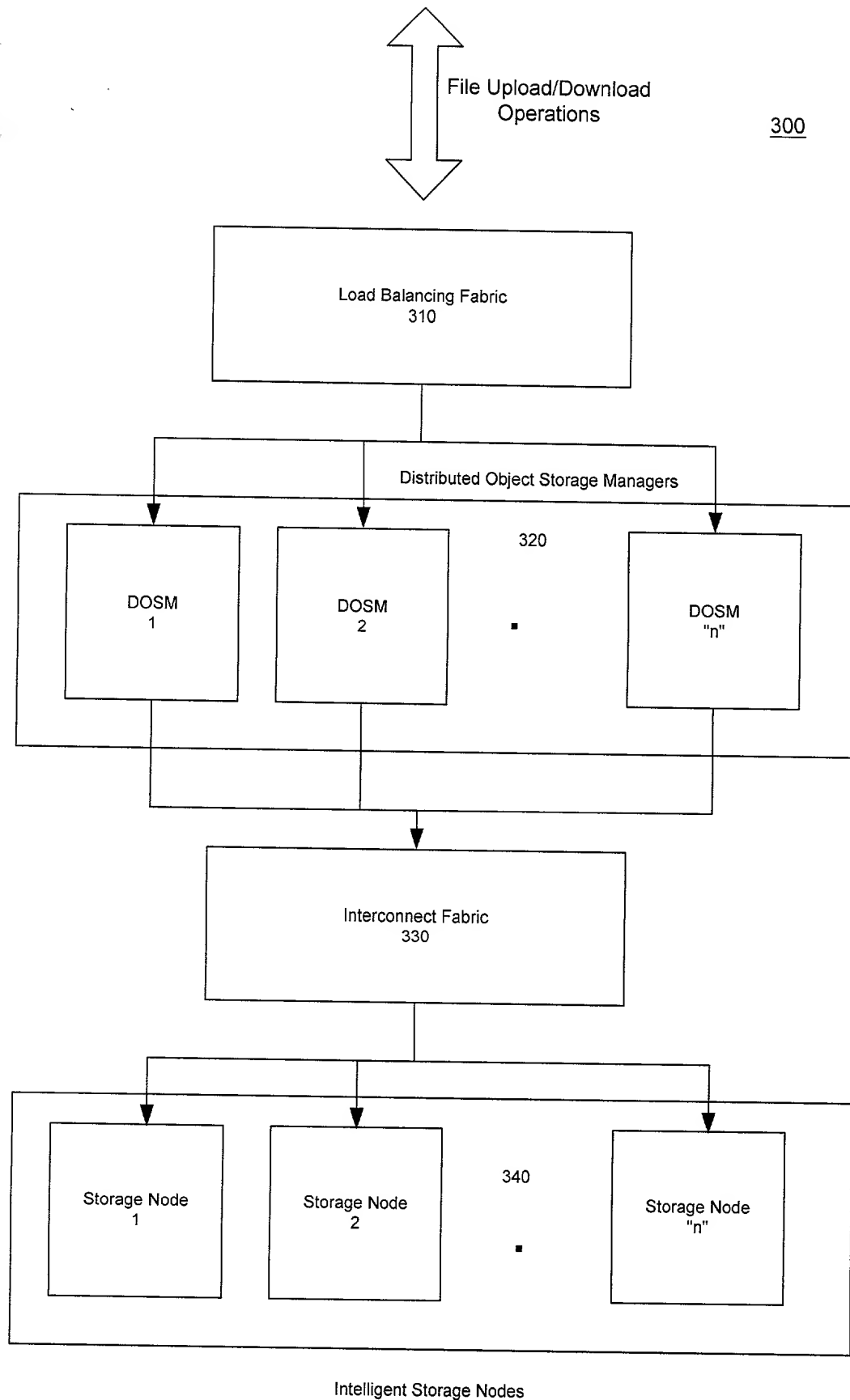
HTTP Requests  
For Object Files

HTTP Requests  
for HTML Files

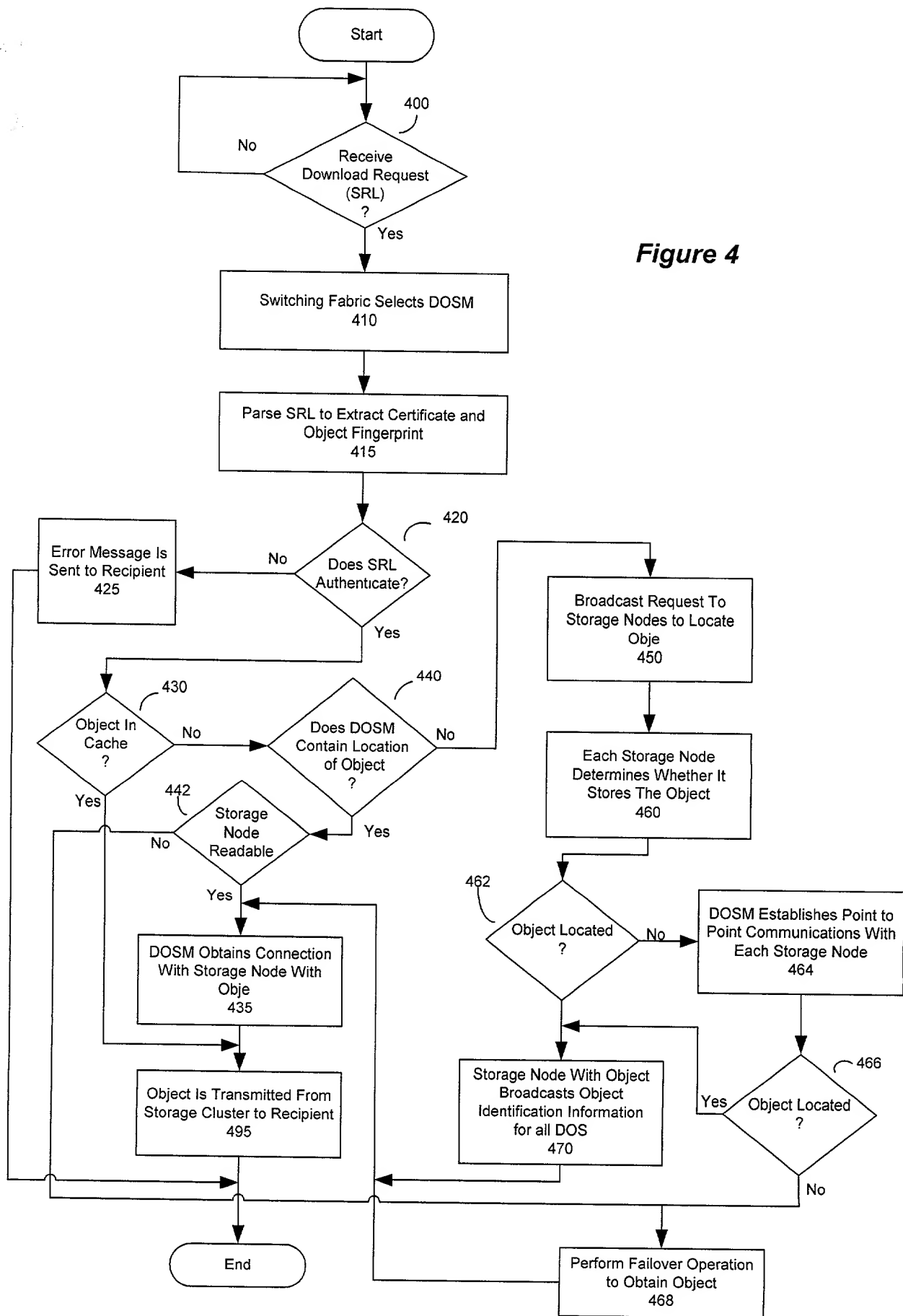


End-User Computer  
100

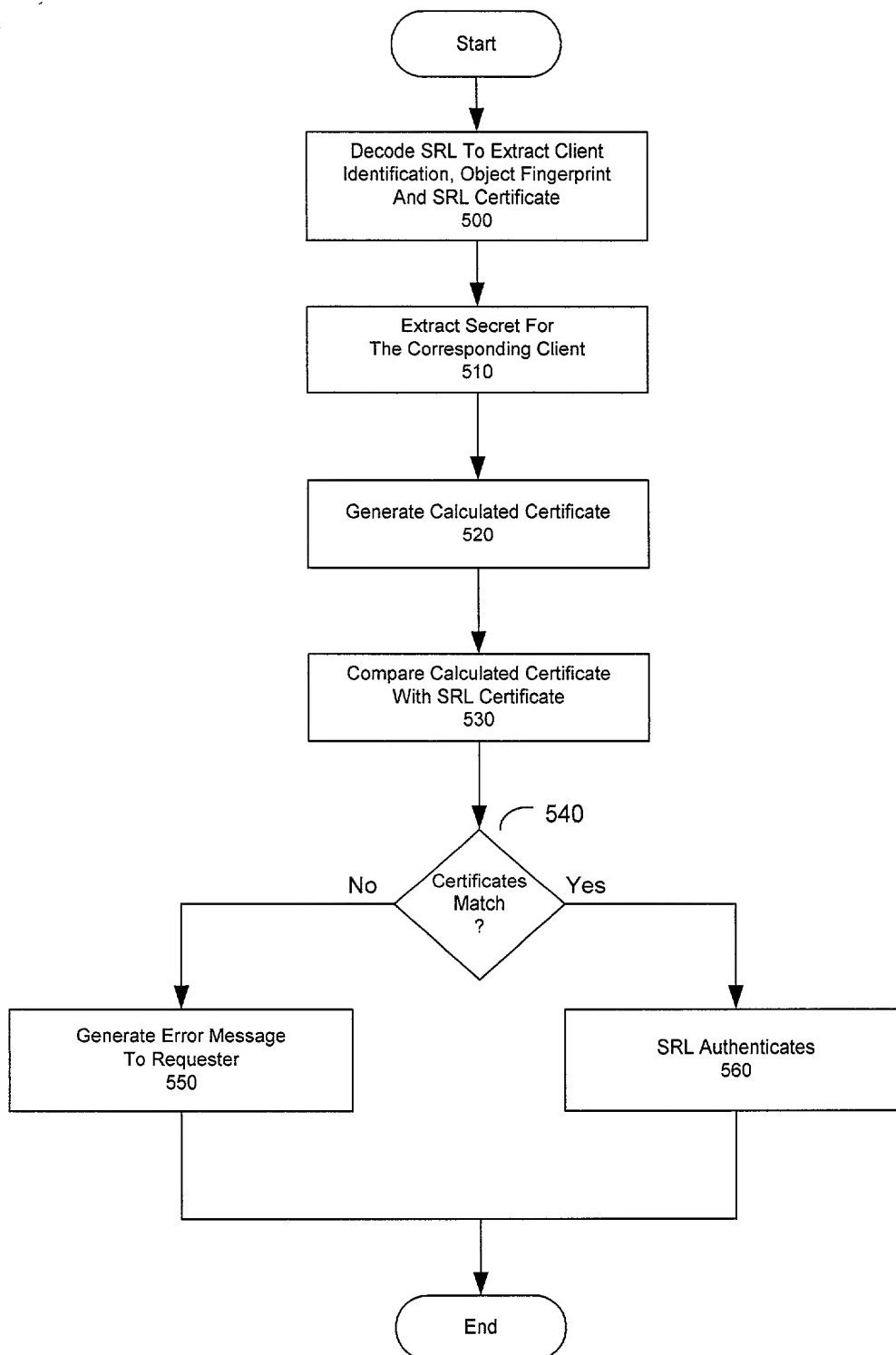
Figure 2



**Figure 3**



**Figure 4**






**Figure 5**

DOSM File Look-up Table  
610

File Id	IP Addr	Disk Id
file1.MD5	10.3.100	3
file2.MD5	10.3.098	1
file3.MD5	10.3.050	6
file4.MD5	10.3.100	2
file5.MD5	10.3.098	1
file6.MD5	10.3.050	8

Data Cache  
620

 Film Snippet
 Advertisement
 Film Preview

State Table  
630

Read - Write State of Storage Nodes
Health of Storage Nodes
Load of Storage Nodes - Storage Capacity - Number of I/O Operatio Per Second

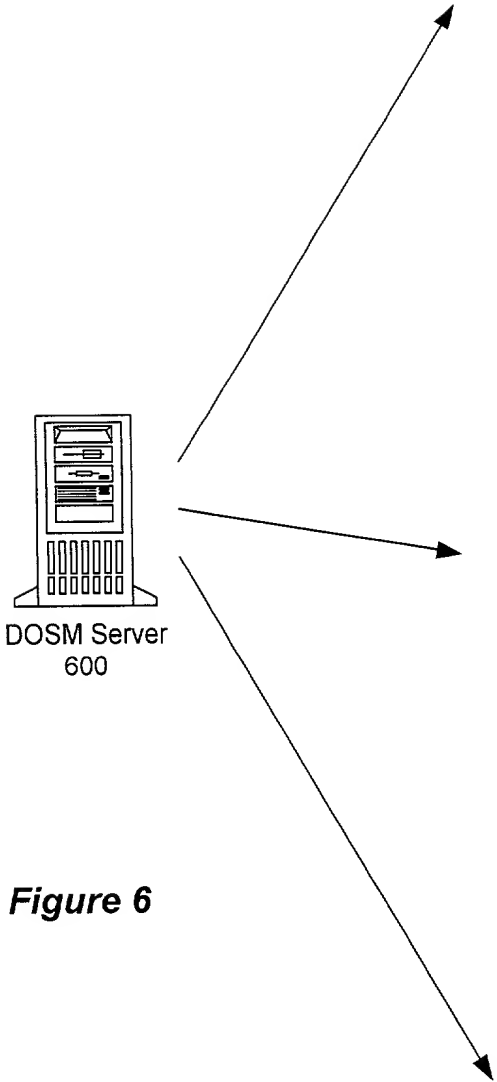


Figure 6

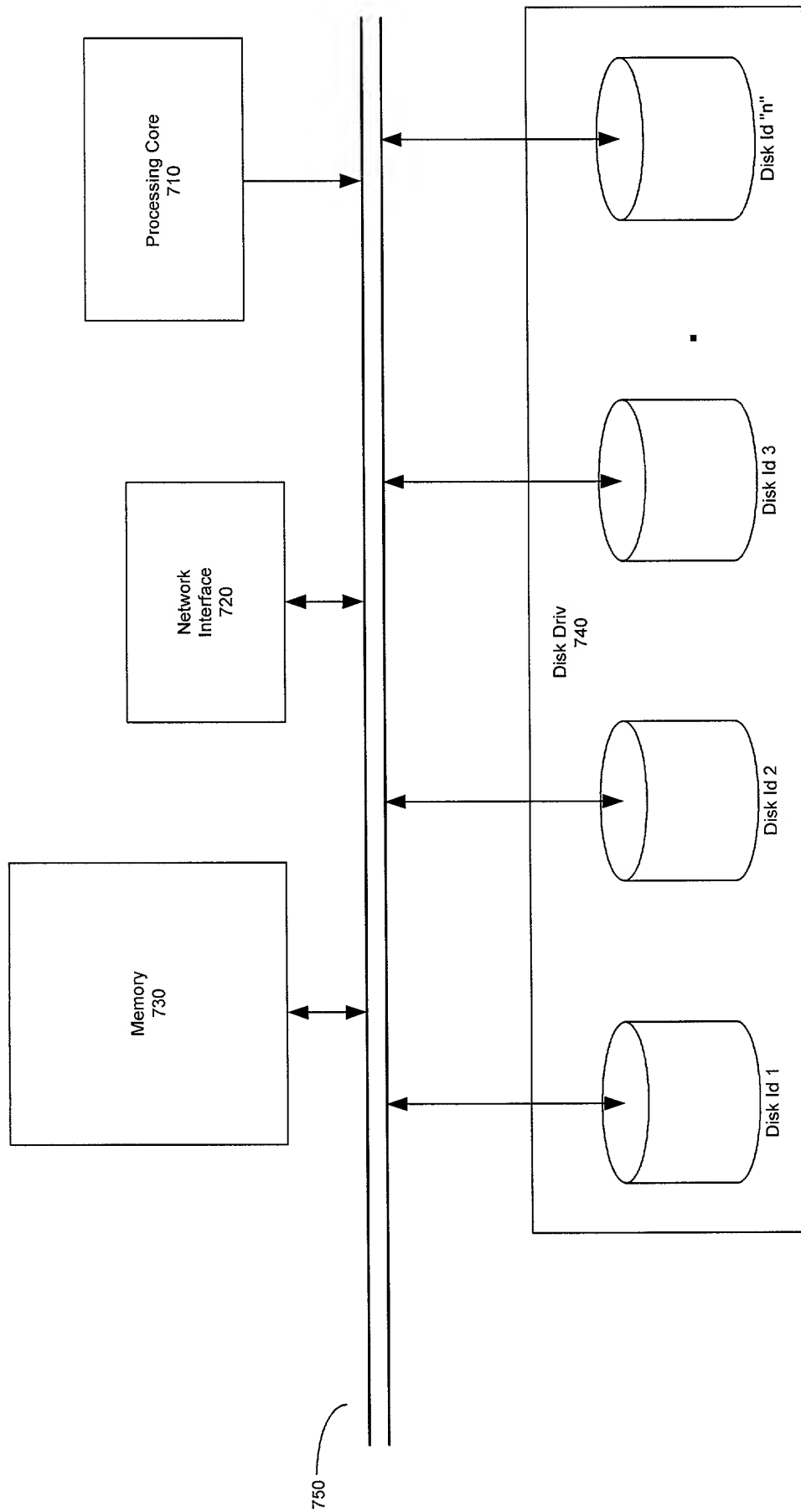
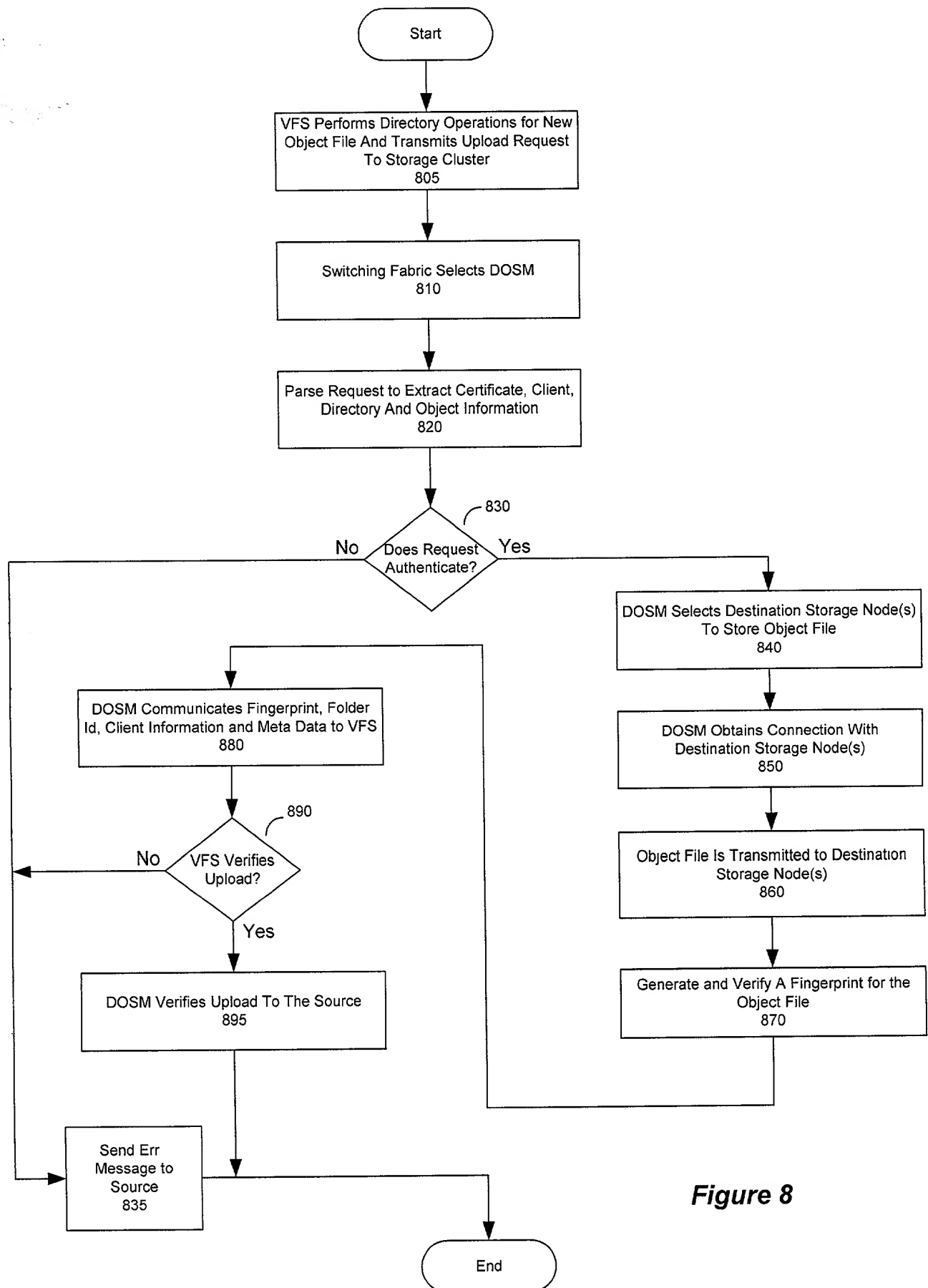
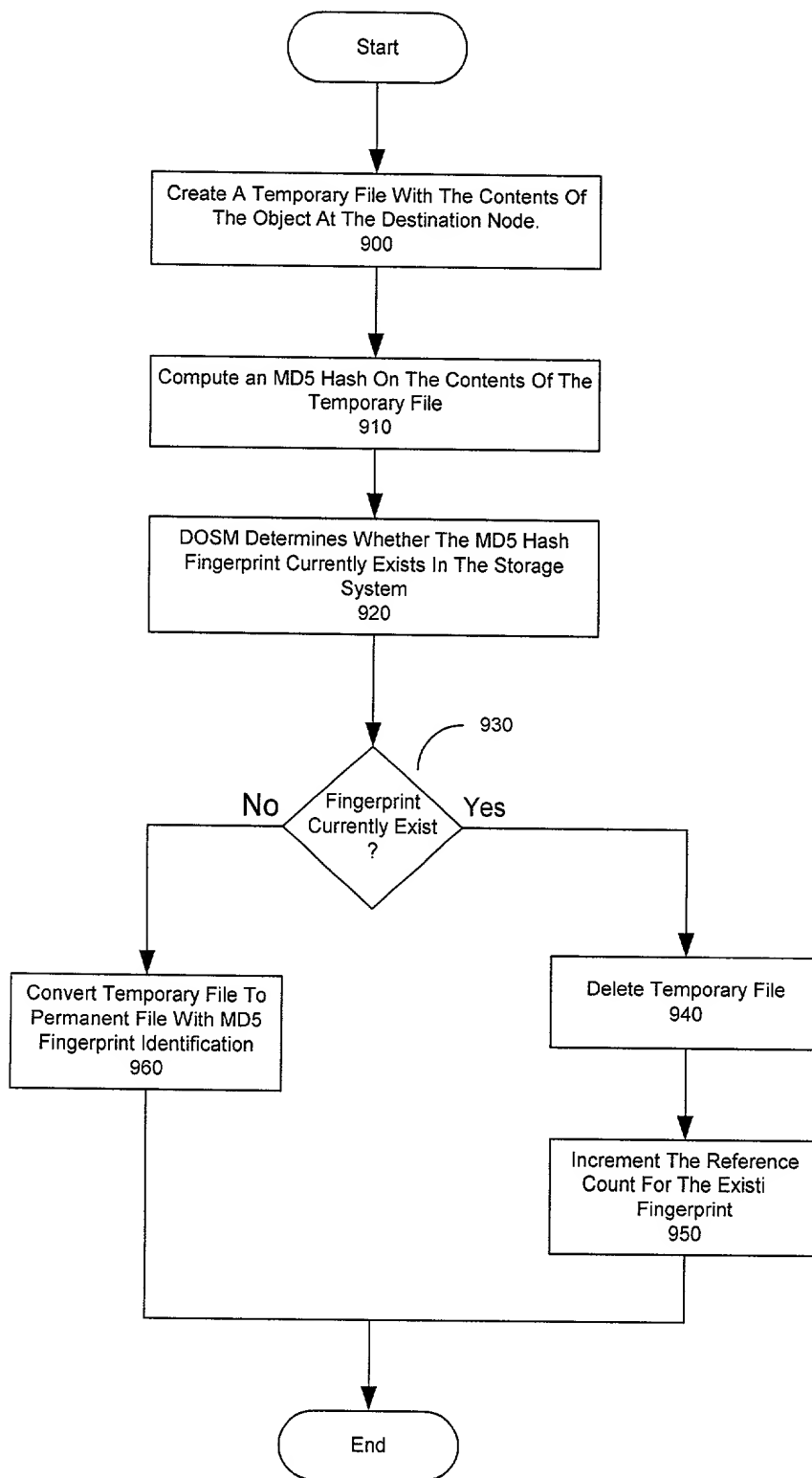


Figure 7



**Figure 8**





**Figure 9**



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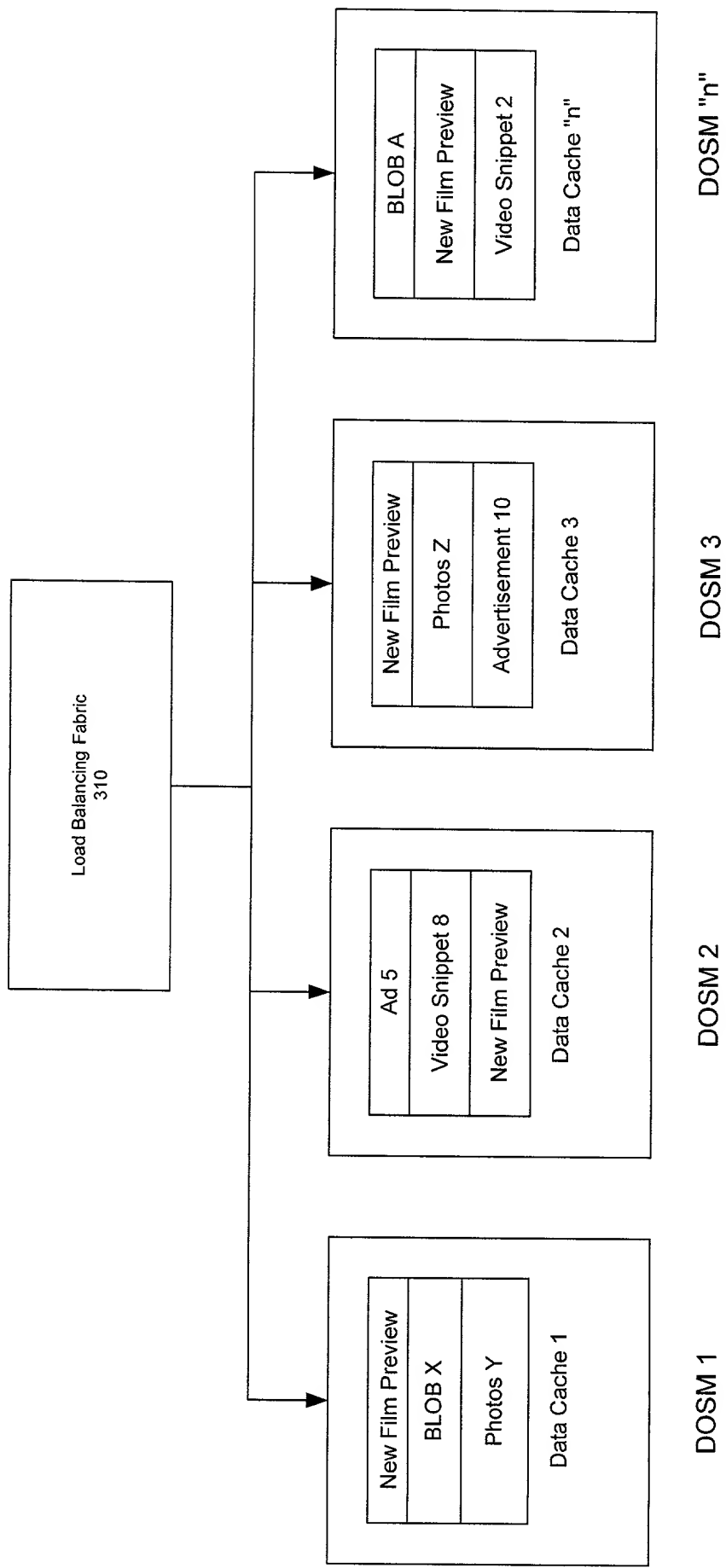
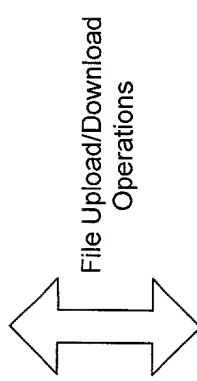
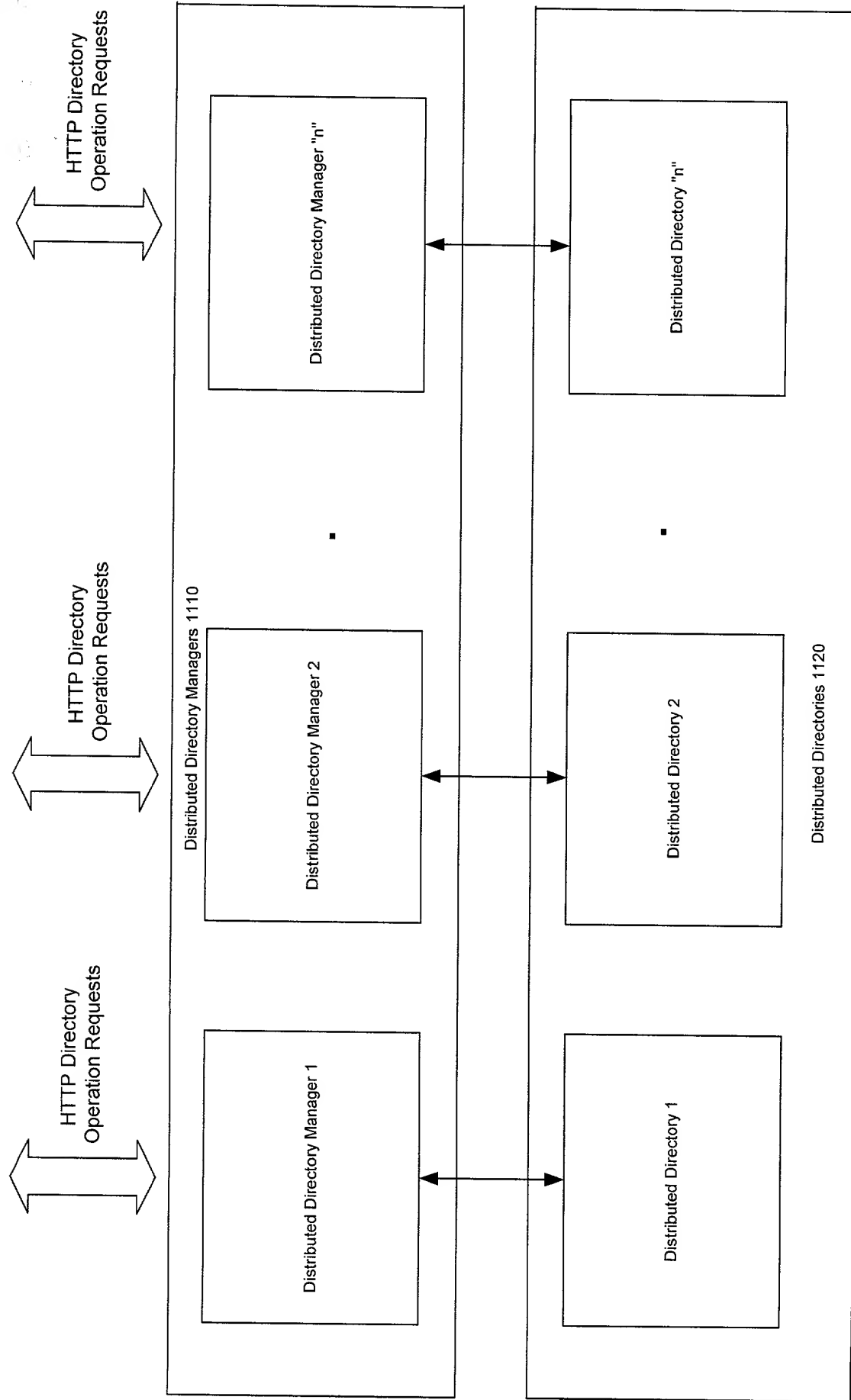


Figure 10



**Figure 11**

Customer Table

Customer Id	Customer Name	Customer Reserved Fiel
1	Customer	[Customer stores data ...]
2	Customer	[Customer stores data ...]
3	Customer C	[Customer stores data ...]
4	Customer D	[Customer stores data ...]

1200

Folder Tab

Customer Id	Folder Id	Folder Parent Id	Metadata
3	2	-	[Reserved]
3	100	2	[Reserved]
3	251	2	[Reserved]
3	166	251	[Reserved]

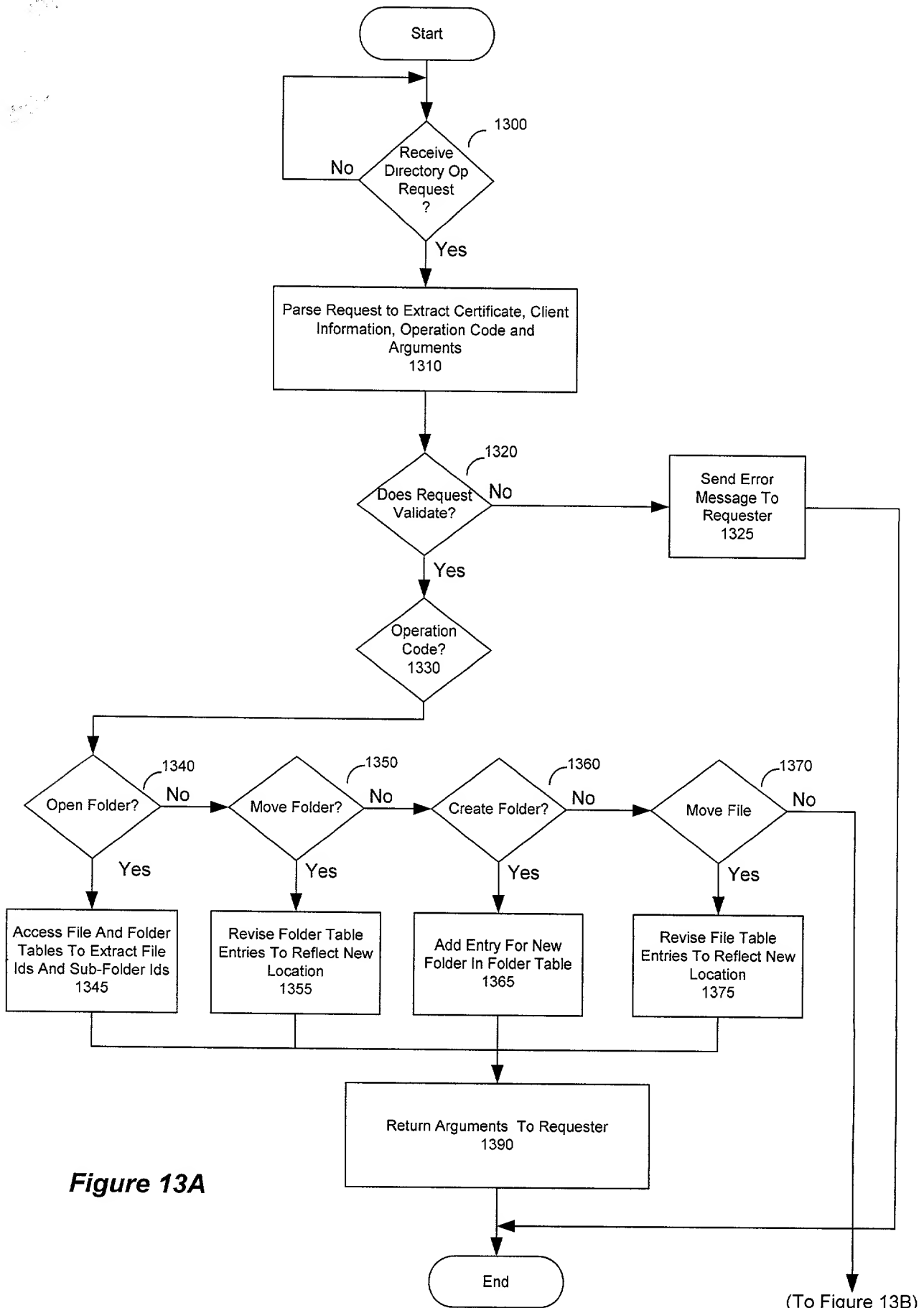
1210

File Table

Customer Id	File Handle	Folder Id	Folder Parent Id	Metadata
3	52.MD5	100	2	[Reserved]
3	55.MD5	100	2	[Reserved]
3	99.MD5	166	251	[Reserved]
3	67.MD5	166	251	[Reserved]

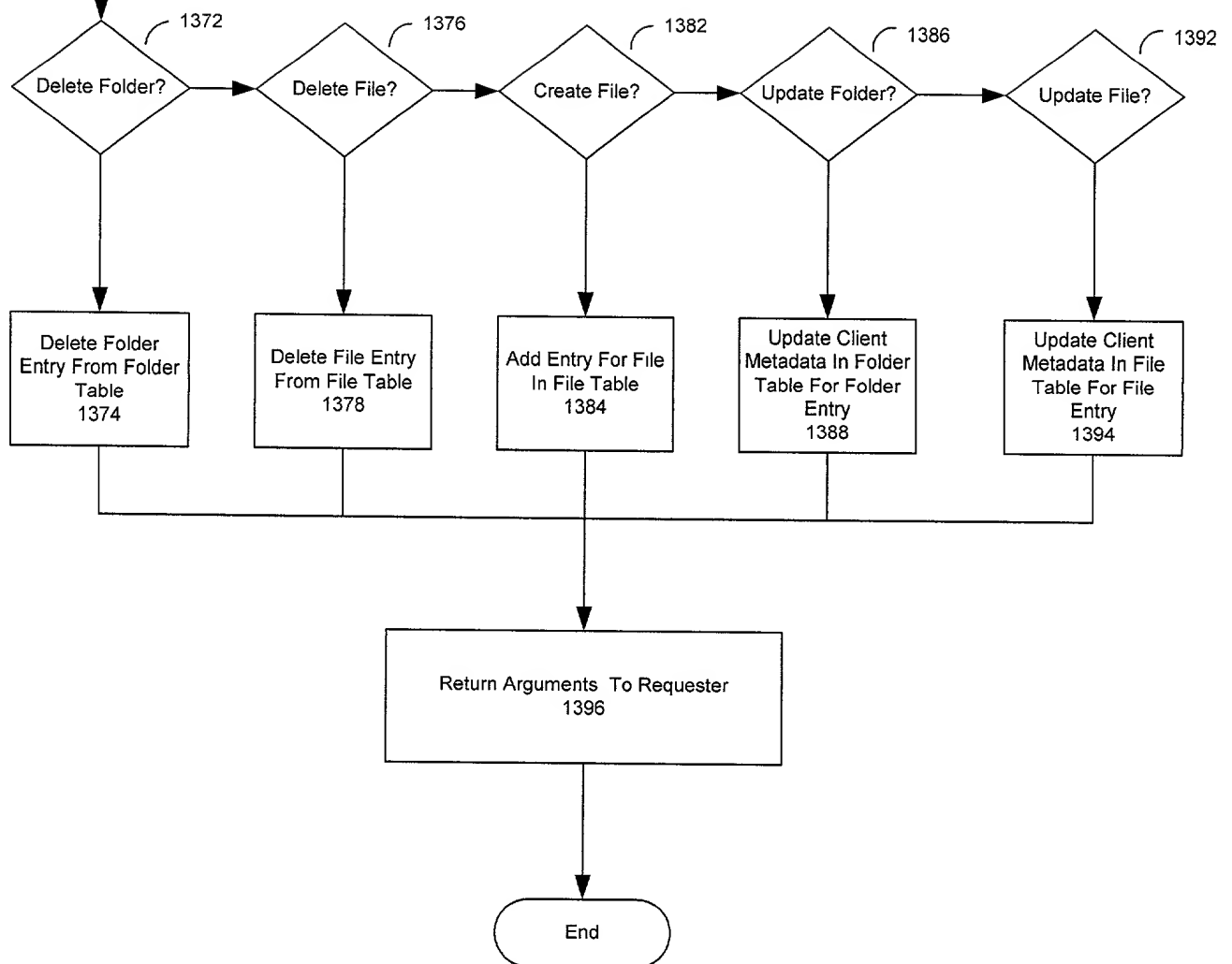
1220

**Figure 12**

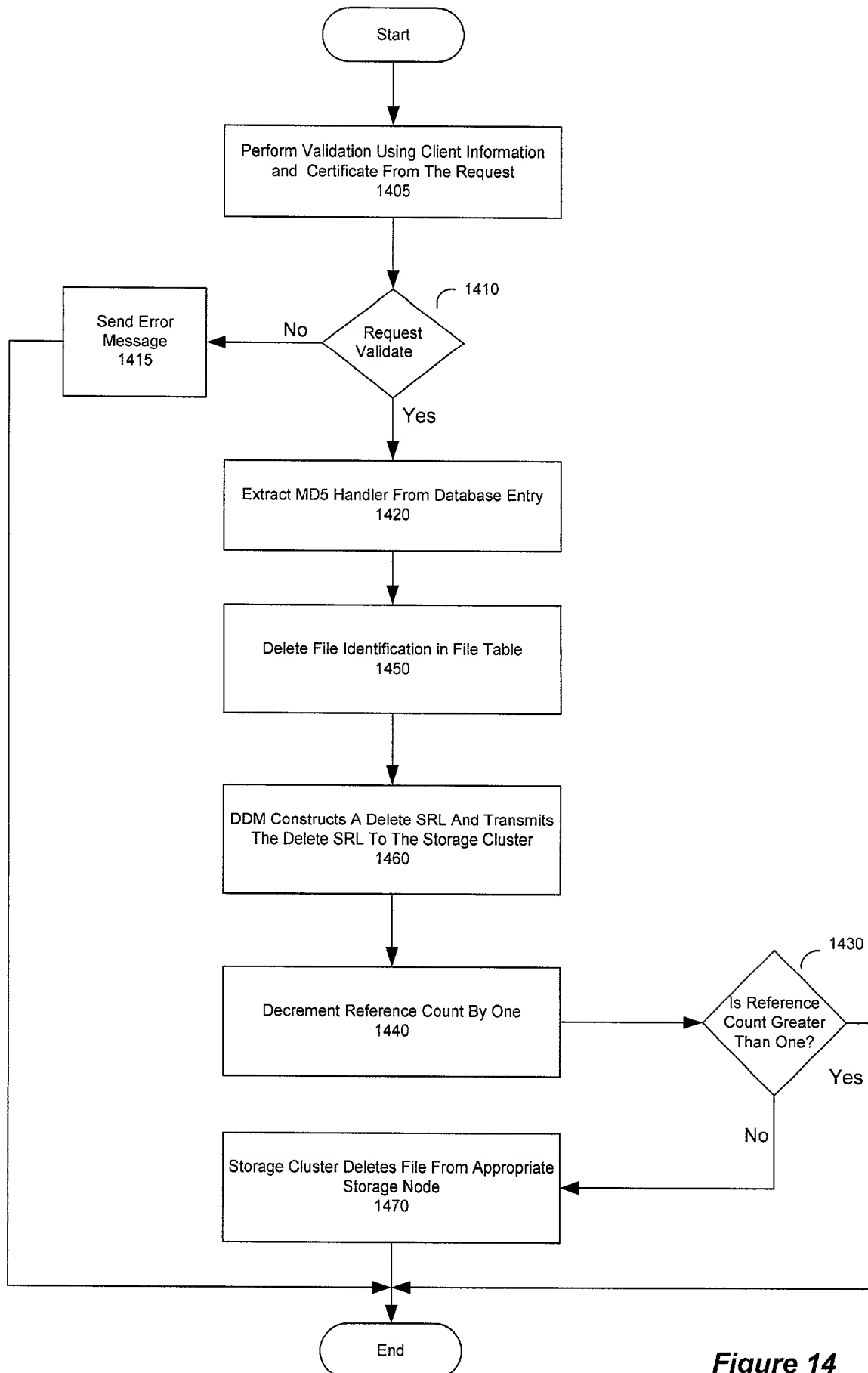


**Figure 13A**

(From Figure 13A)

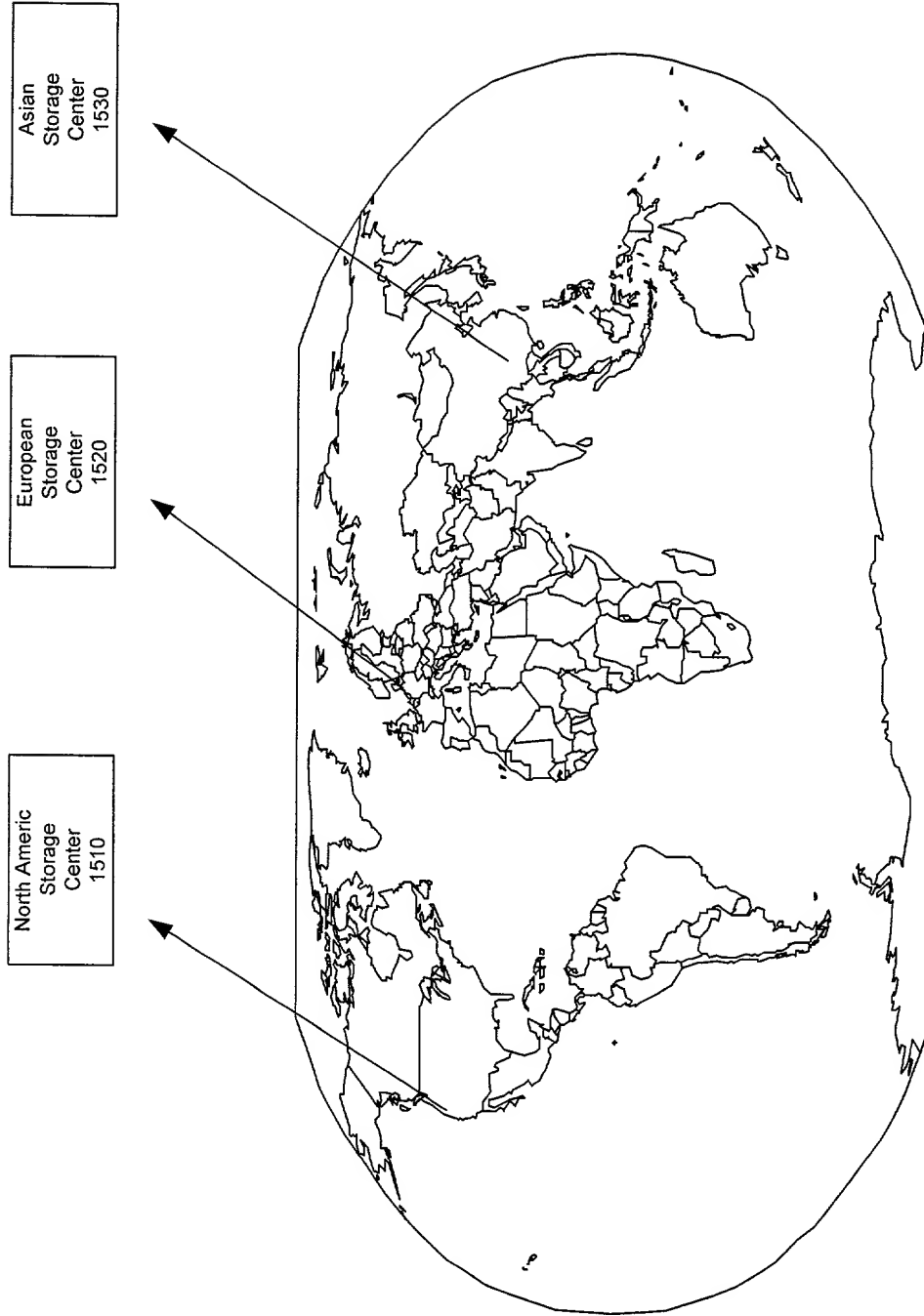


**Figure 13B**



**Figure 14**

UNITED STATES OF AMERICA  
DEPARTMENT OF DEFENSE  
OFFICE OF THE SECRETARY  
SECURITY AND MILITARY AGENCIES  
WASHINGTON, D.C. 20301-5000



**Figure 15**



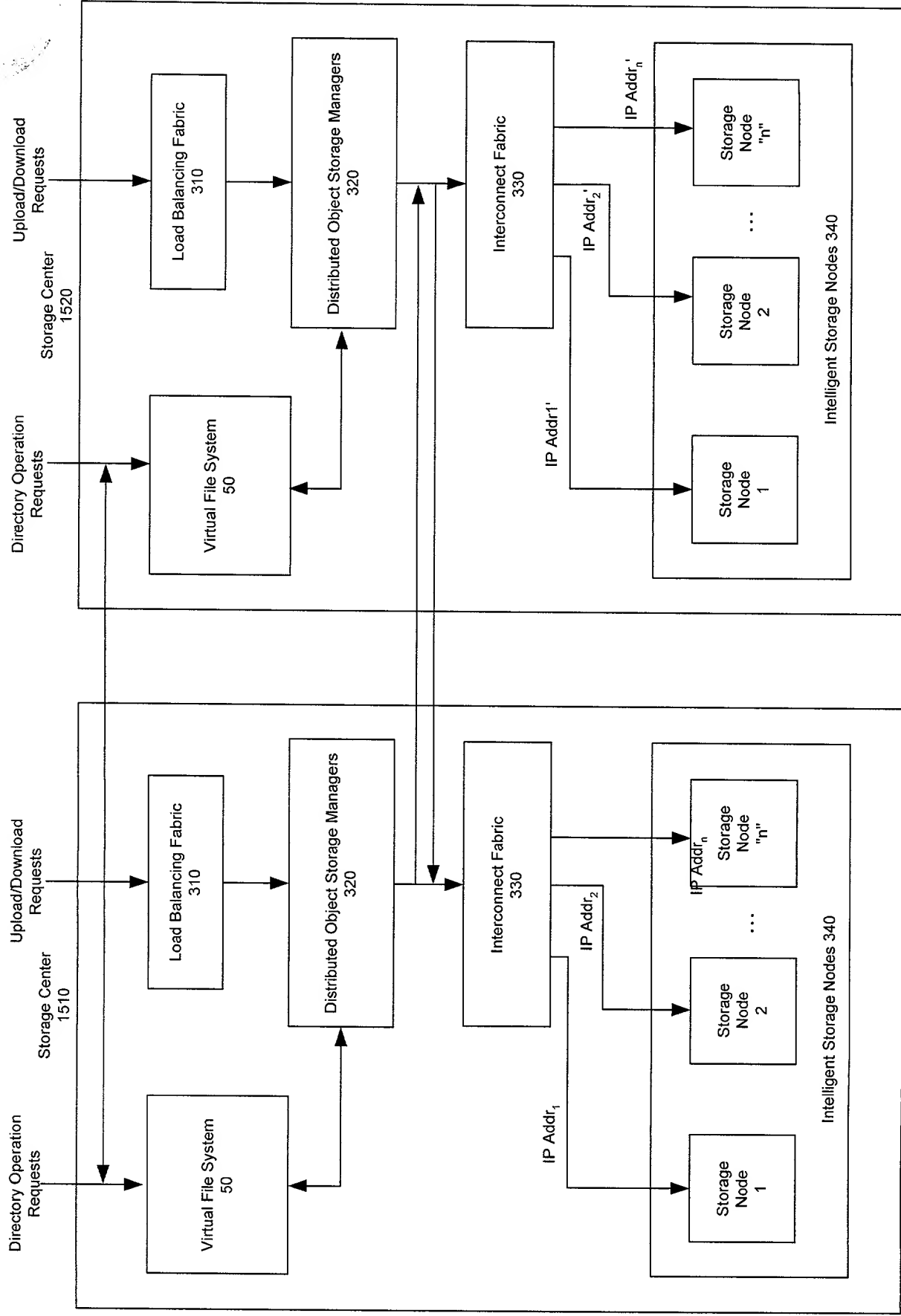


Figure 16

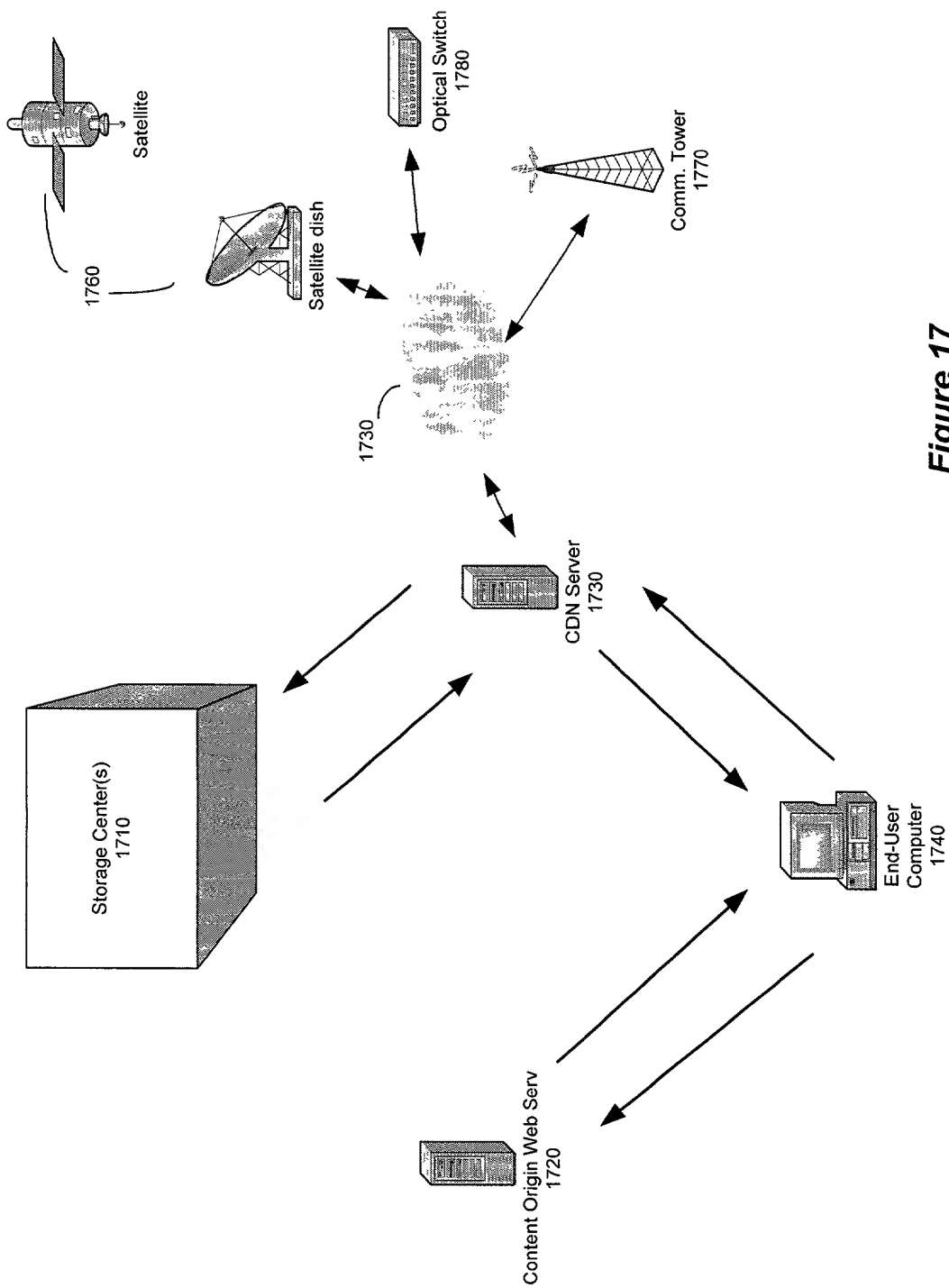
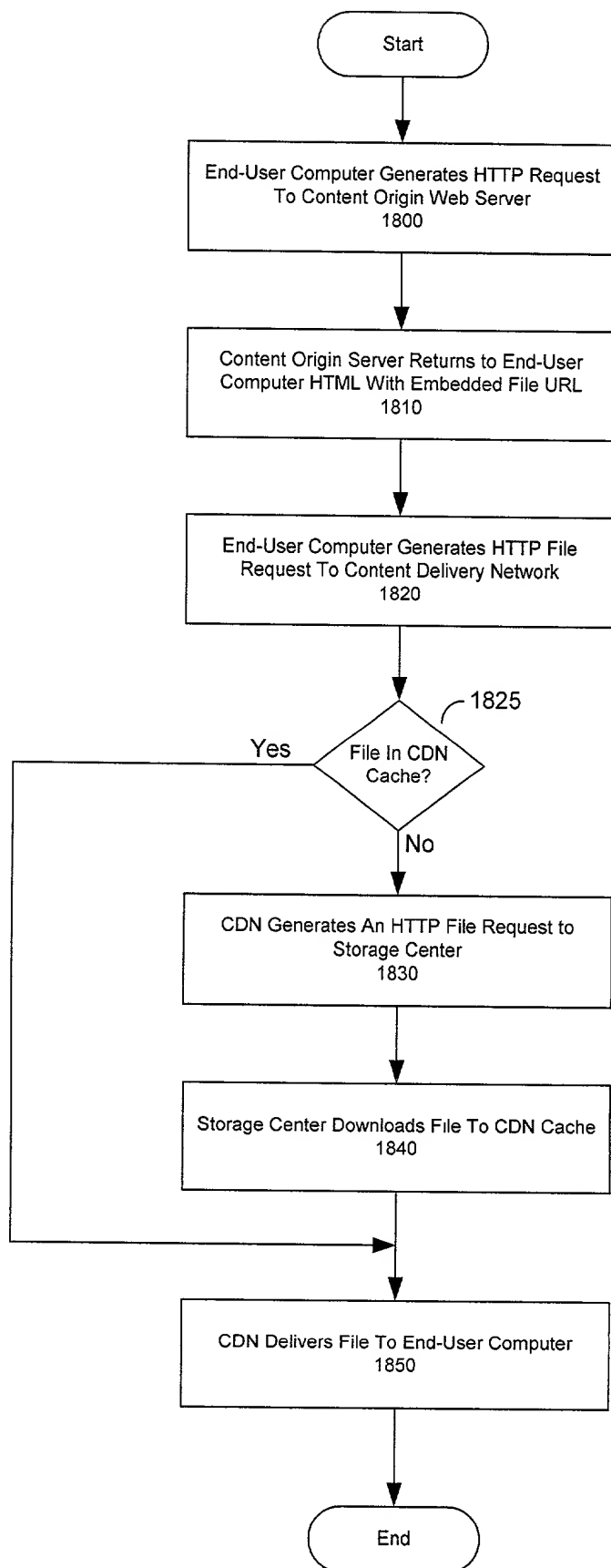
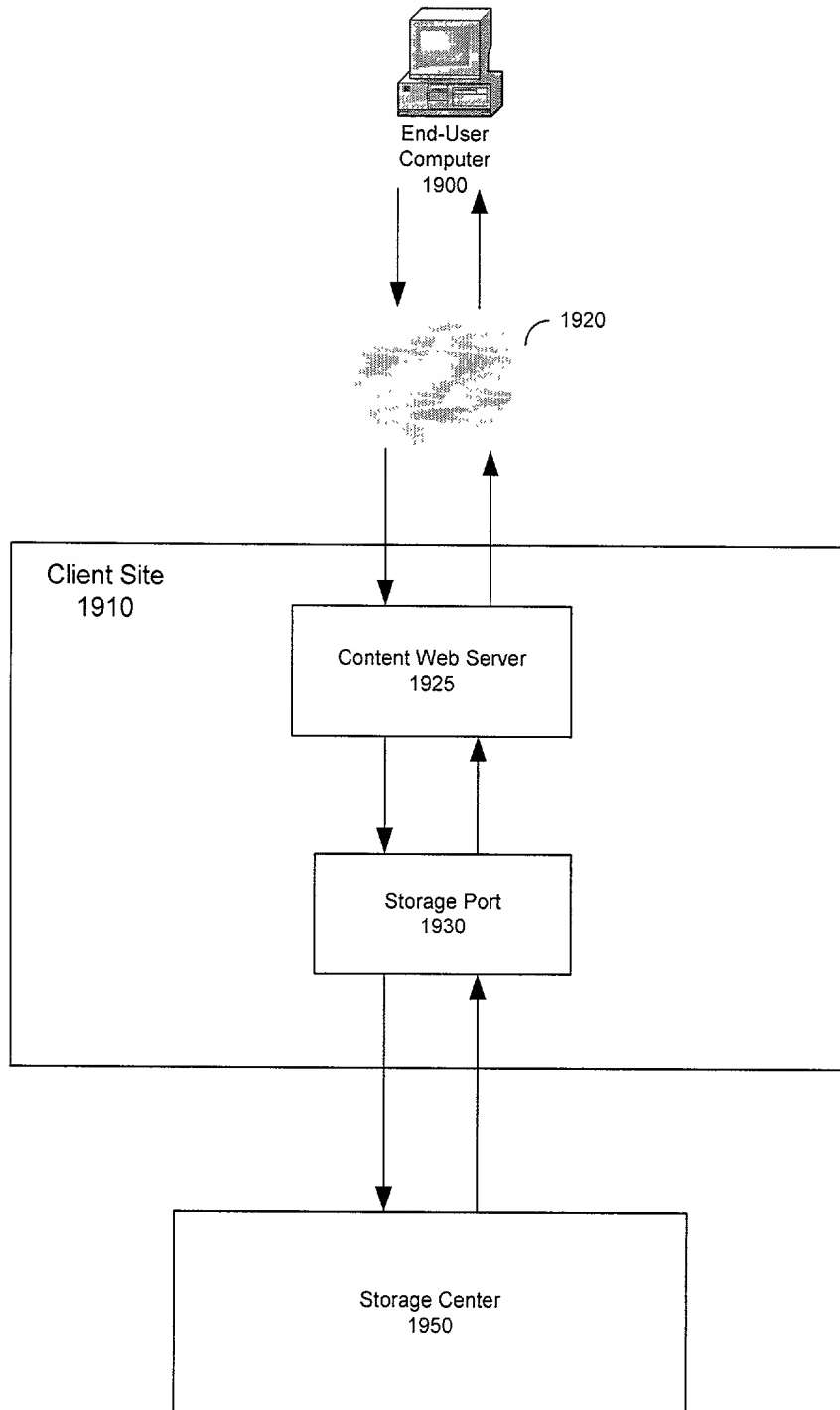


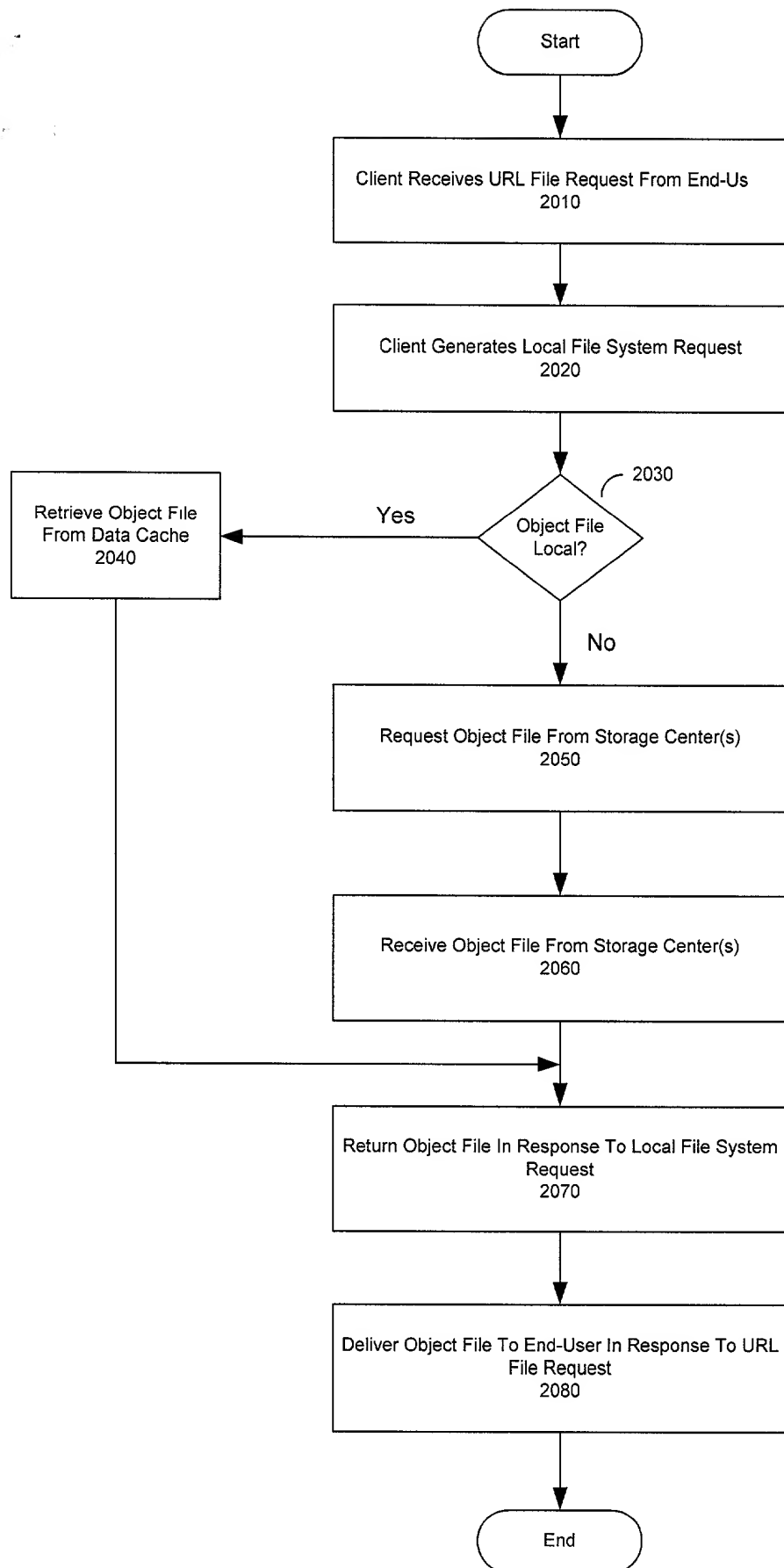
Figure 17



**Figure 18**



**Figure 19**



**Figure 20**

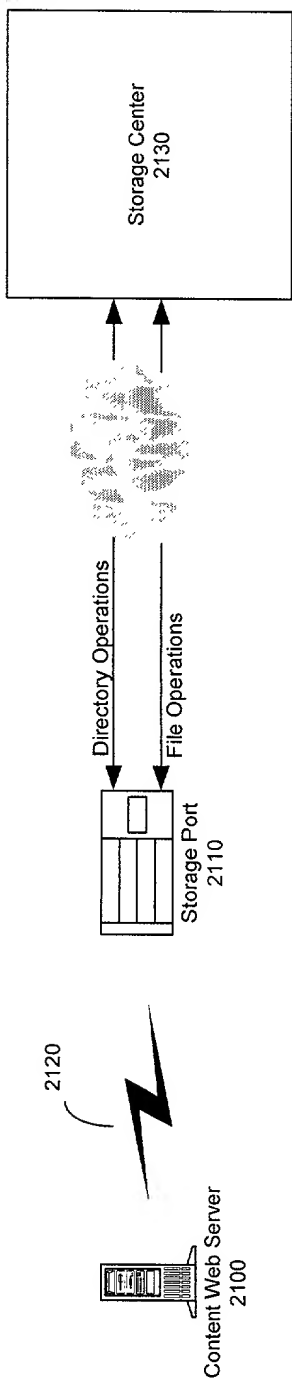


Figure 21a

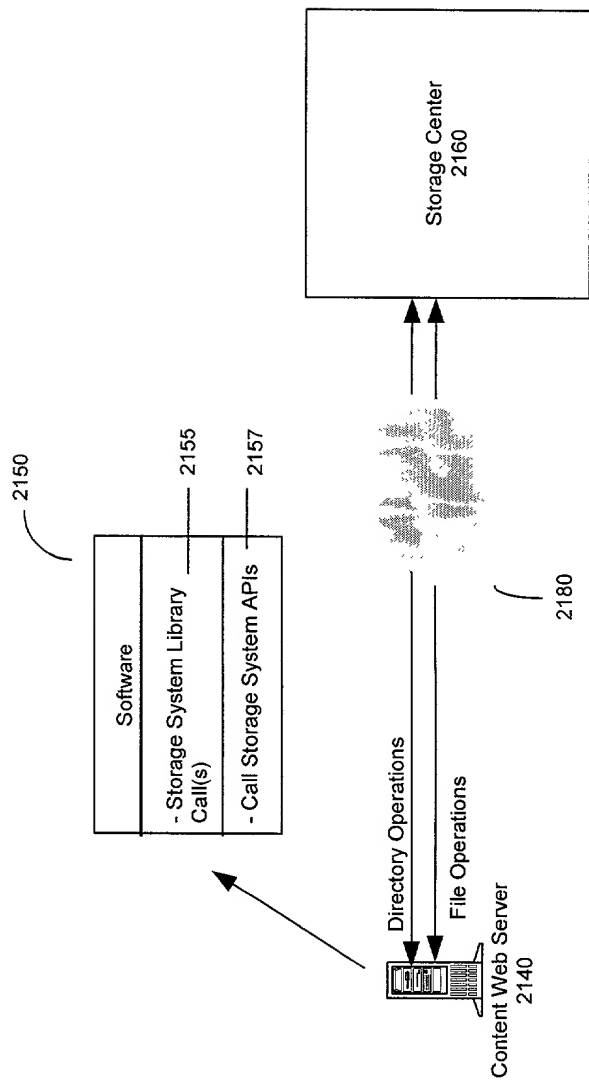


Figure 21b

FIG. 22 is a block diagram of a system architecture. The system includes a Processing Core 2210, Memory 2230, and a Storage Port 2200. The Storage Port 2200 is connected to the Processing Core 2210 and Memory 2230. The Storage Port 2200 is also connected to a Network Interface(s) 2220, which includes Network Interface Card 1, Network Interface Card 2, and Network Interface Card N. The Storage Port 2200 is also connected to a Storage Port DataStore 2240, which includes Disk Drive 1 and Disk Drive "n".

Storage Port  
2200

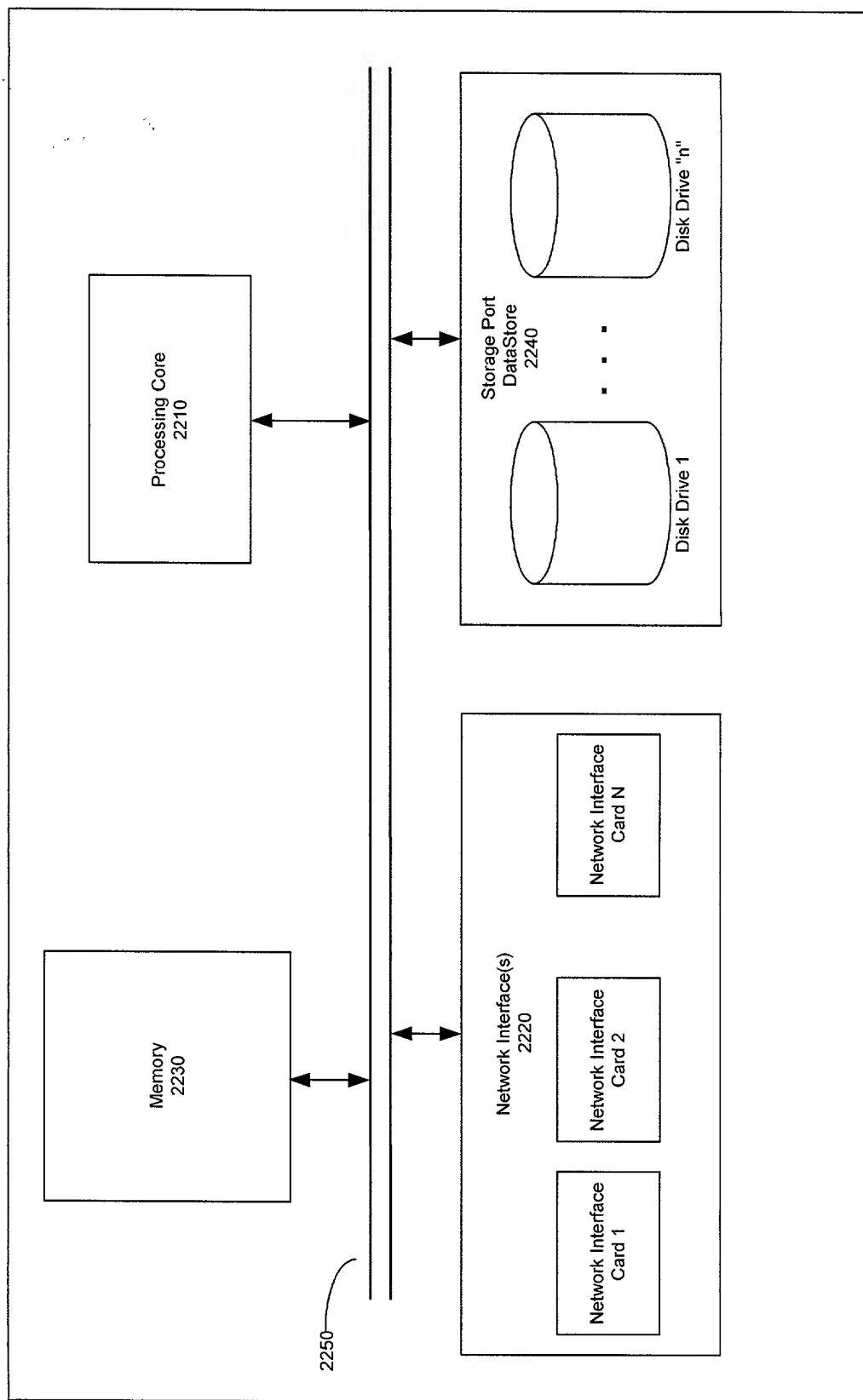
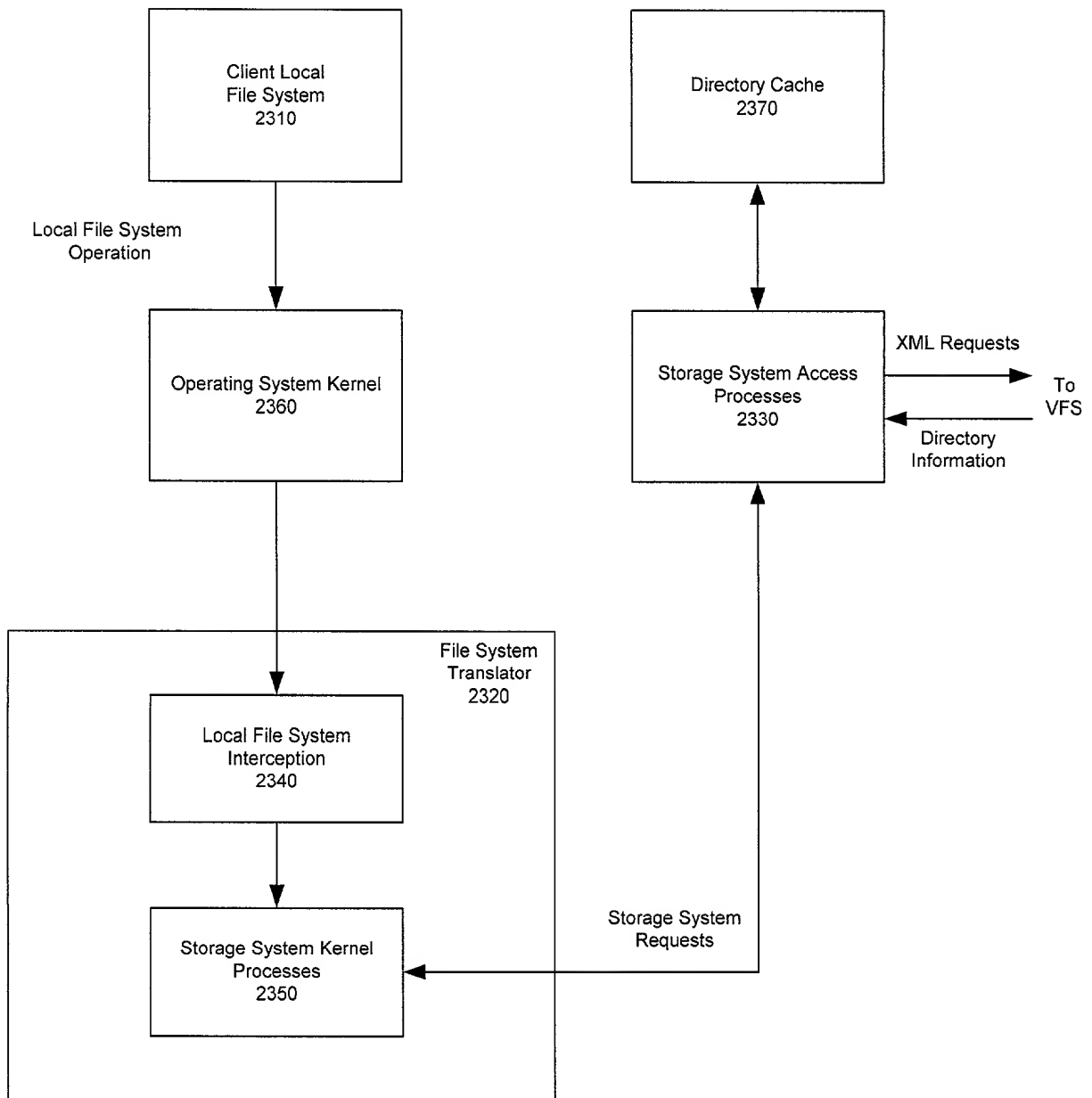


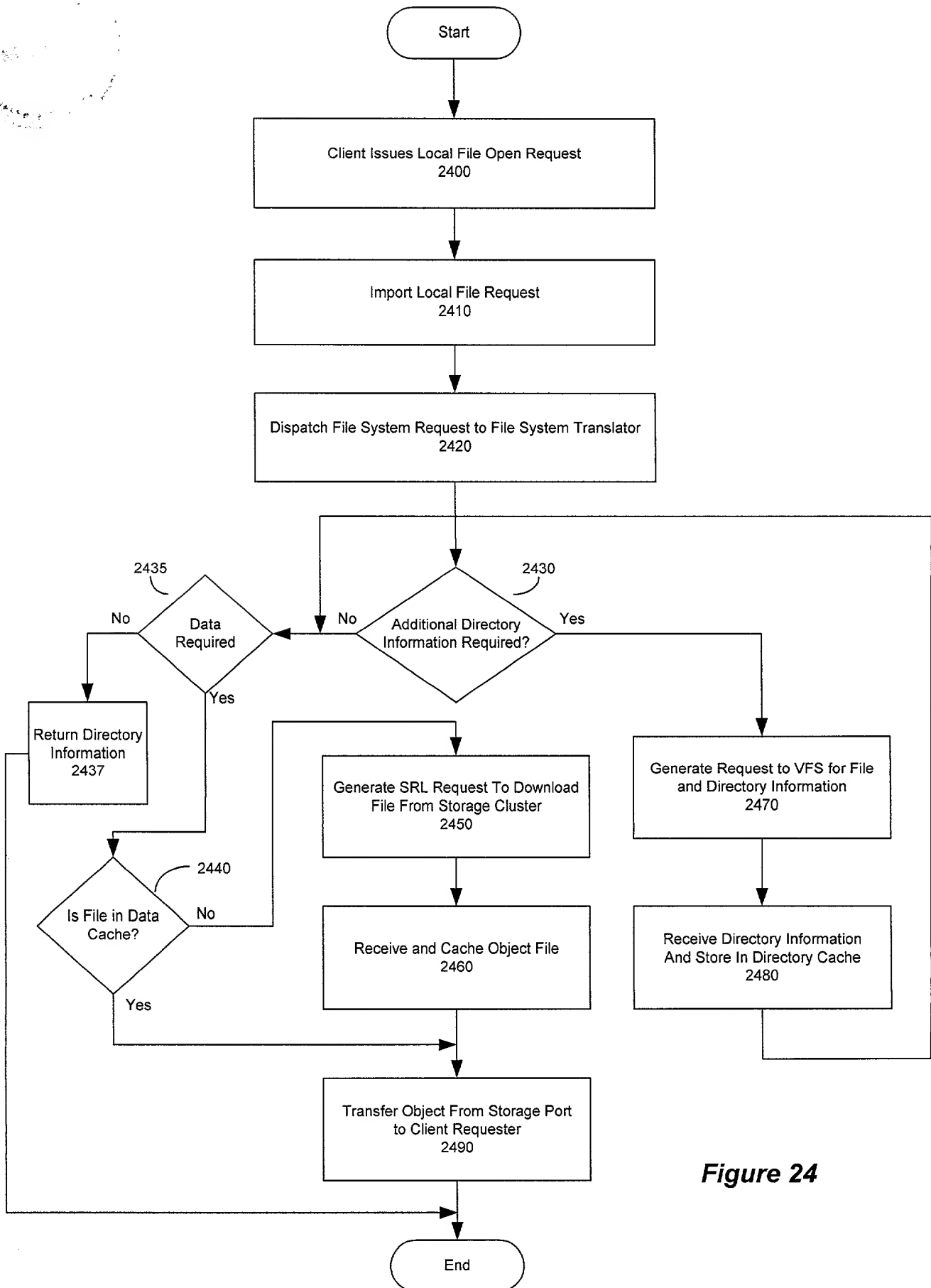
Figure 22

2300



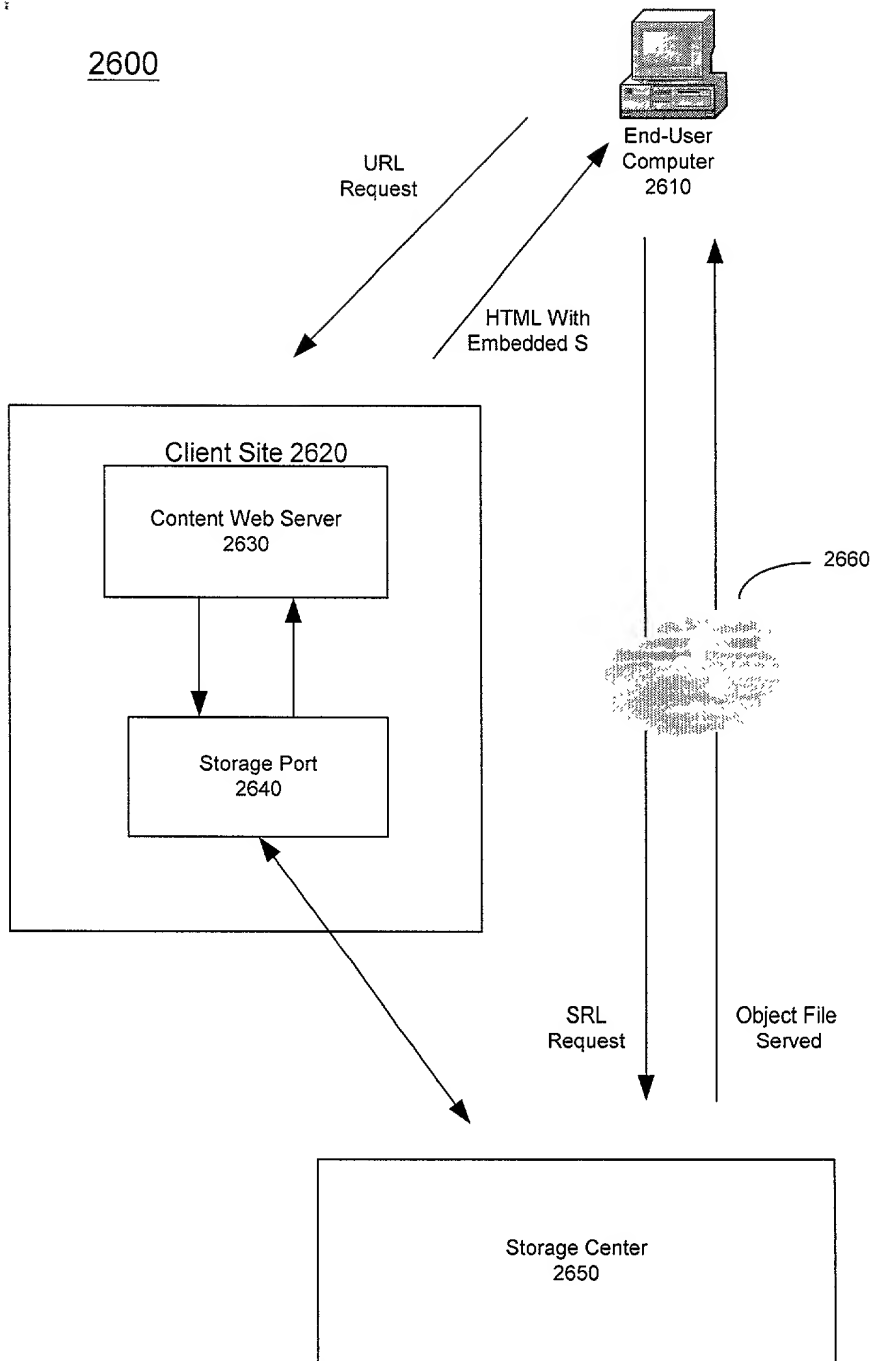
**Figure 23**



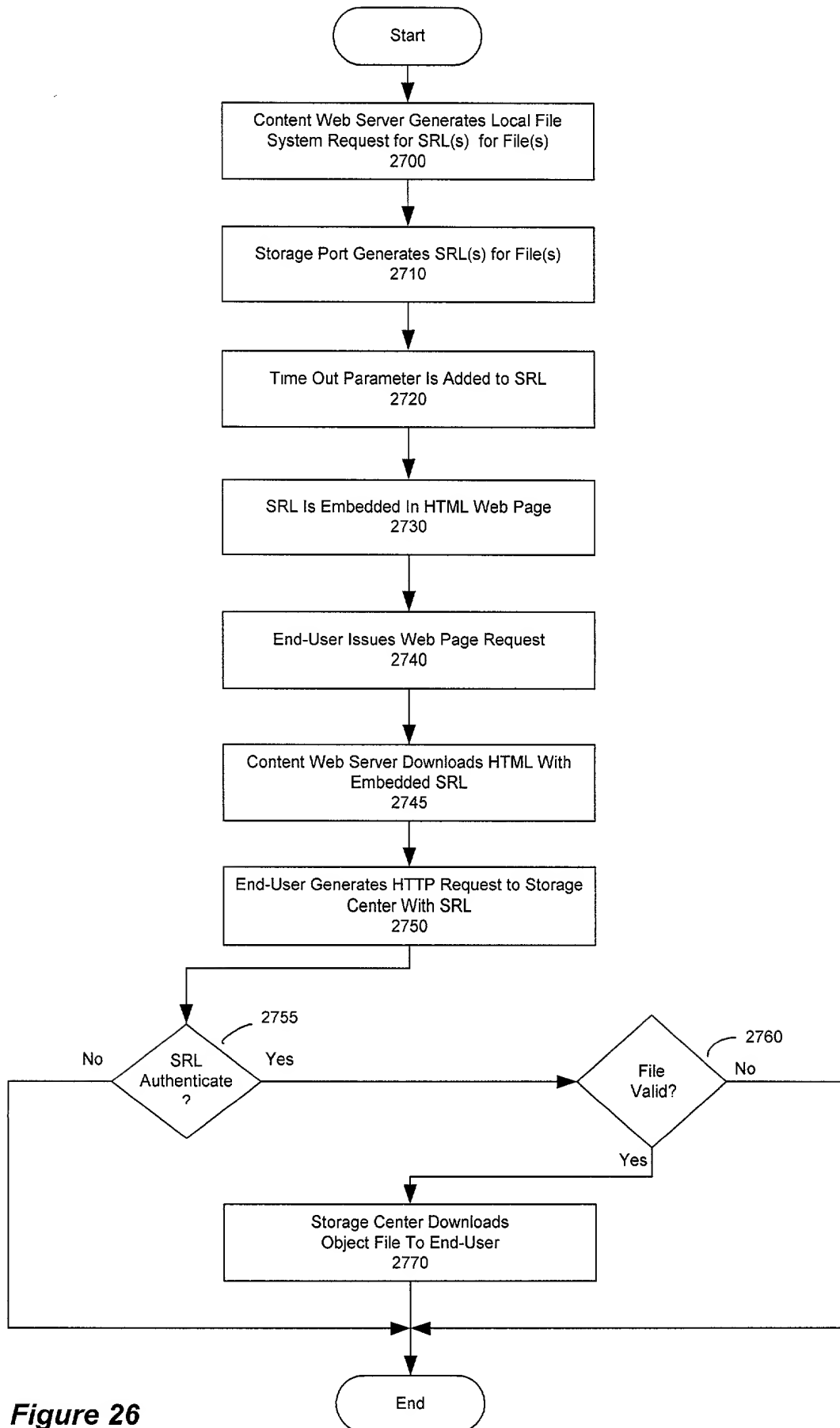


**Figure 24**

2600

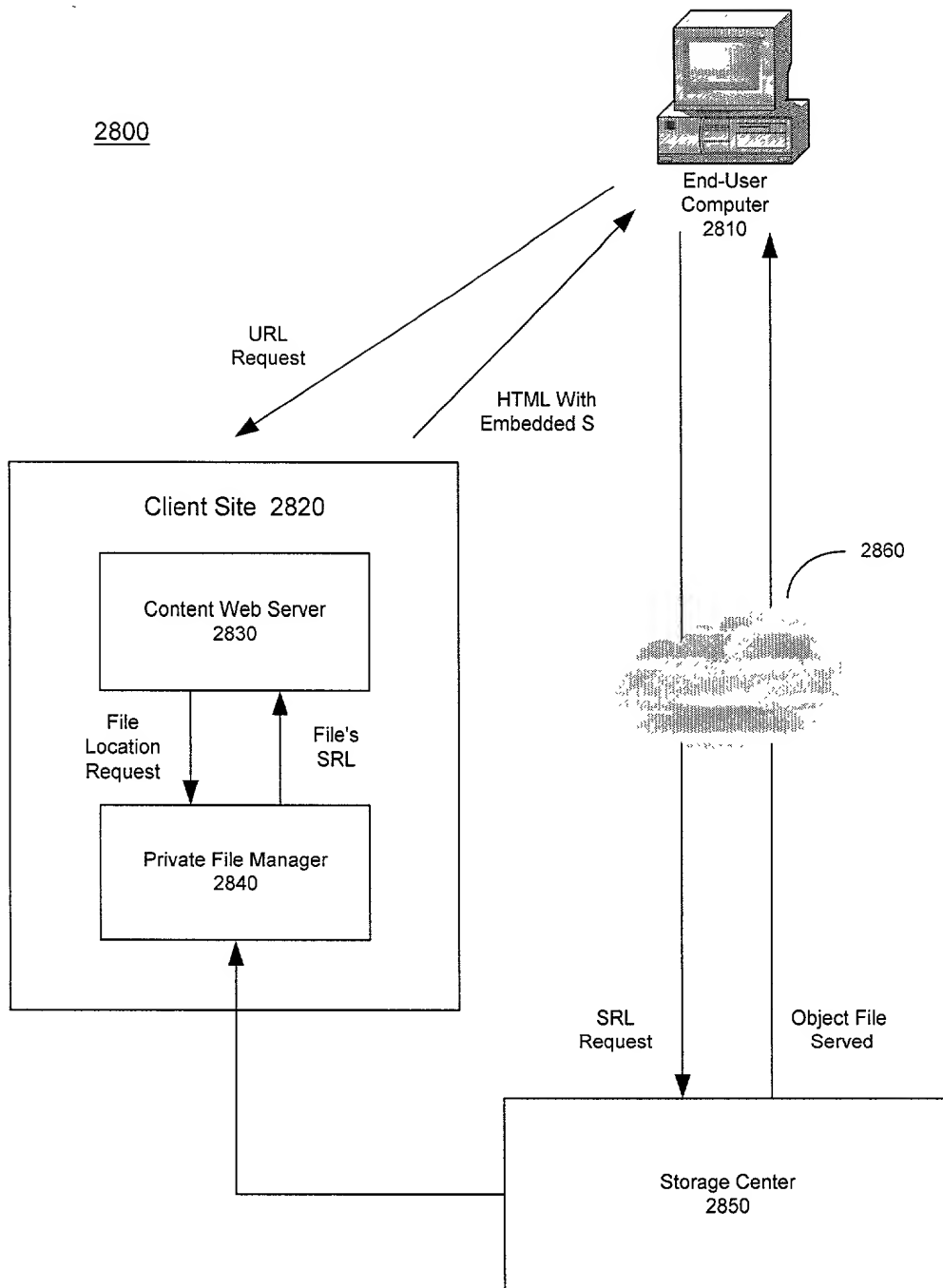


**Figure 25**

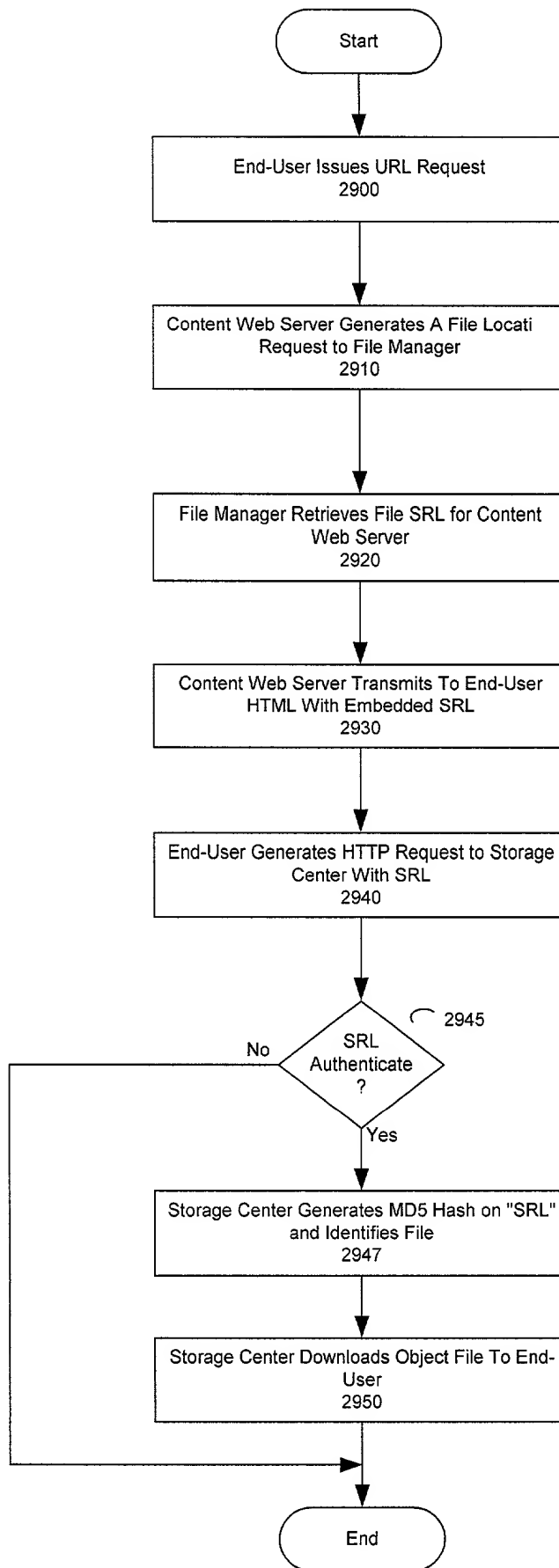


**Figure 26**

2800



**Figure 27**



**Figure 28**

FIG. 29 is a block diagram of a system architecture for a client site network. The system includes an Active Storage Port 3010 and a Passive Storage Port 3020. Both ports are connected to a Client Site Network 3060. The Active Storage Port 3010 includes a Network Interface 3045, a Network Interface 3055, and a Health Monitoring 3070. The Passive Storage Port 3020 includes a Network Interface 3025, a Network Interface 3030, and a Health Monitoring 3080. A Failover Monitoring 3065 is connected to the Network Interfaces 3055 and 3030. The system also includes an IP Addr block connected to the Network Interface 3050. The Client Site Network 3060 is connected to the Network Interfaces 3045, 3050, 3025, and 3035.

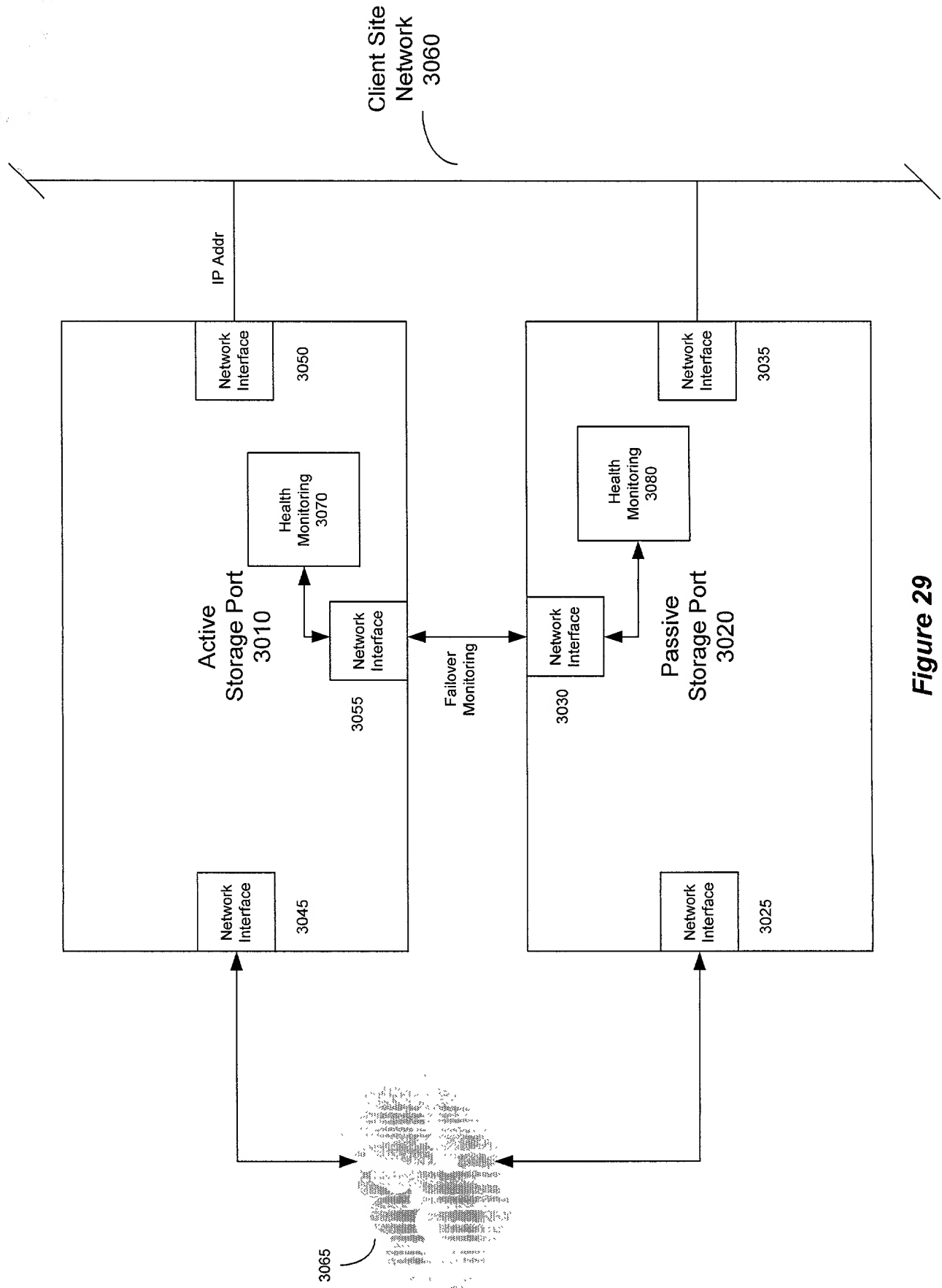
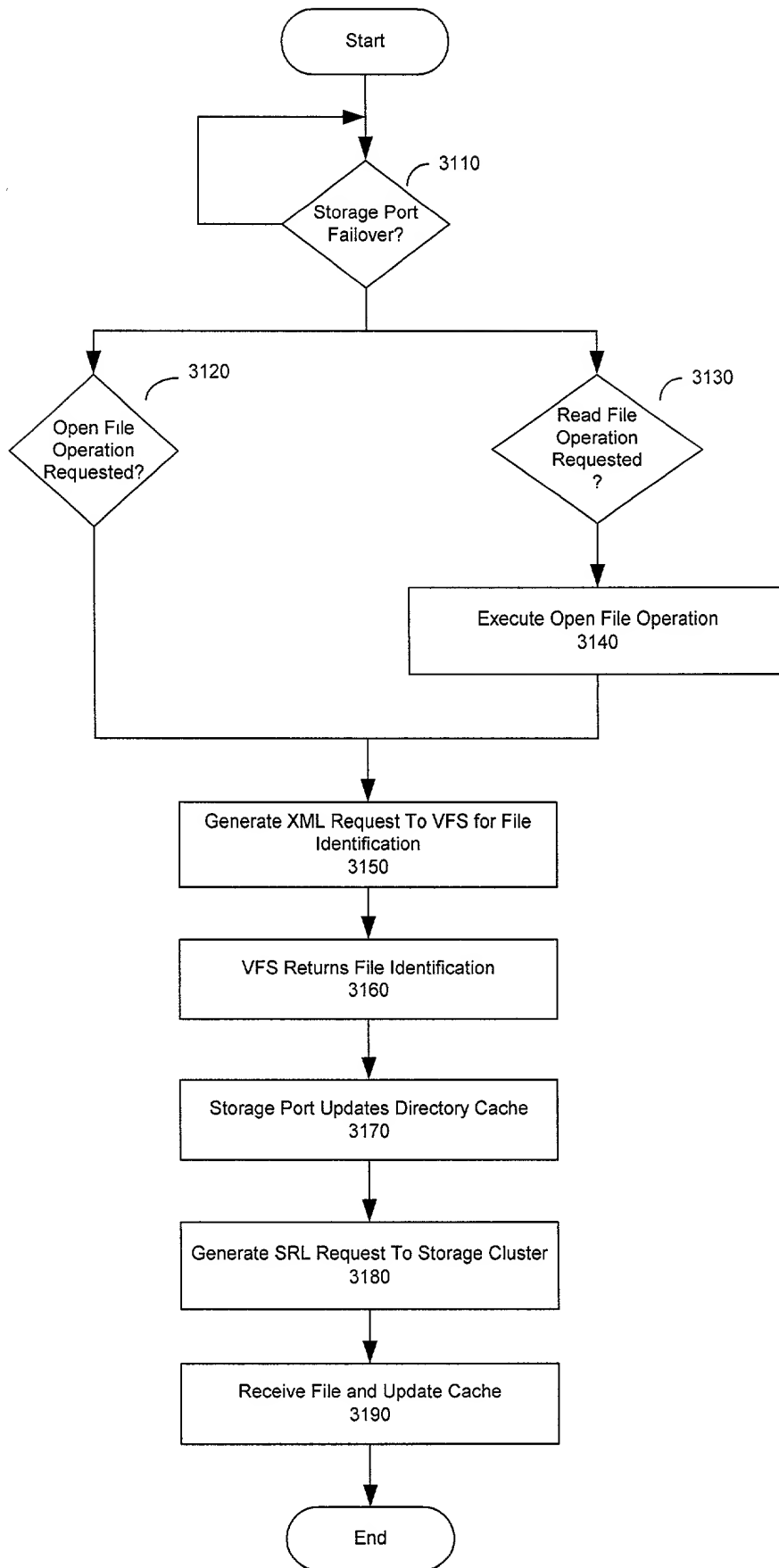
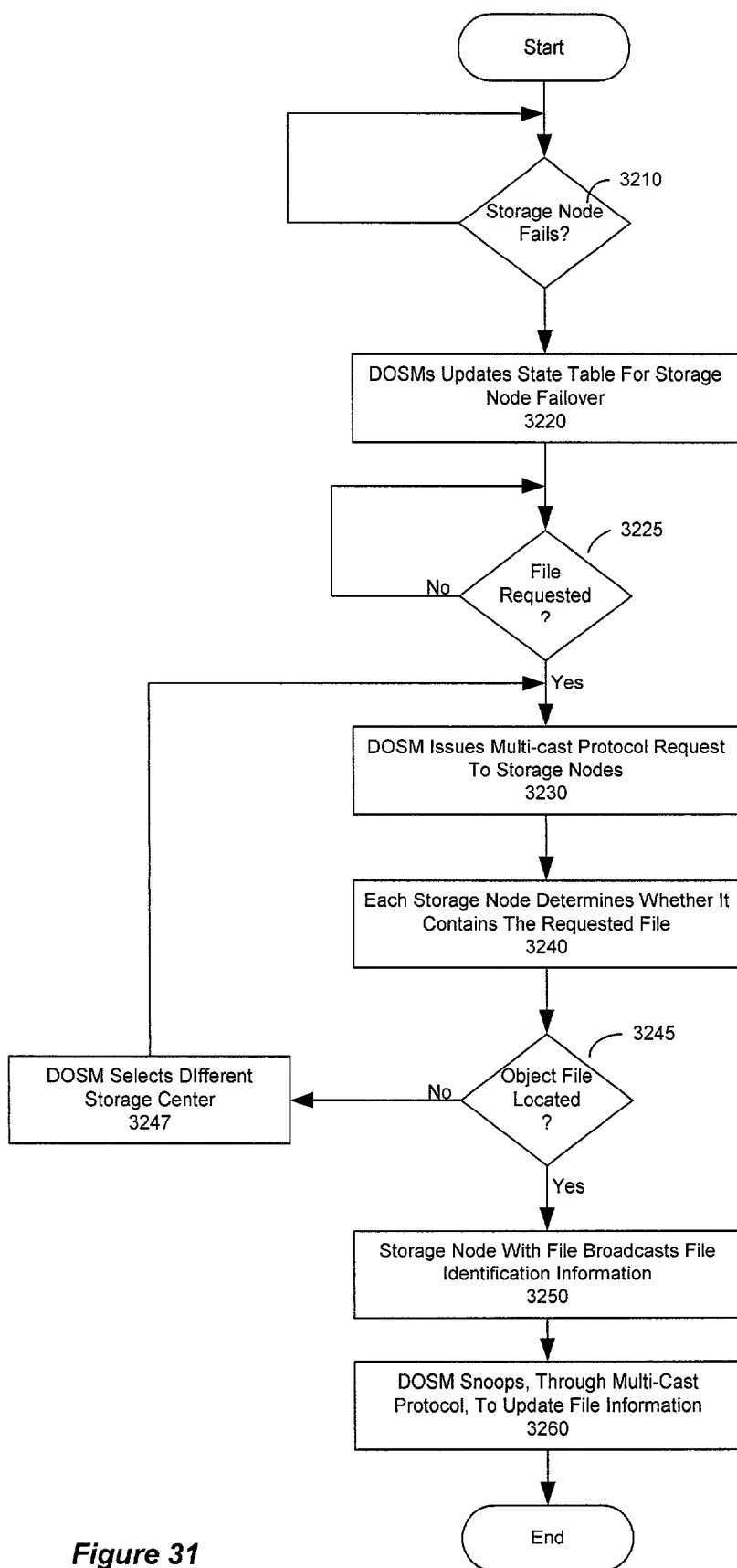


Figure 29



**Figure 30**



**Figure 31**